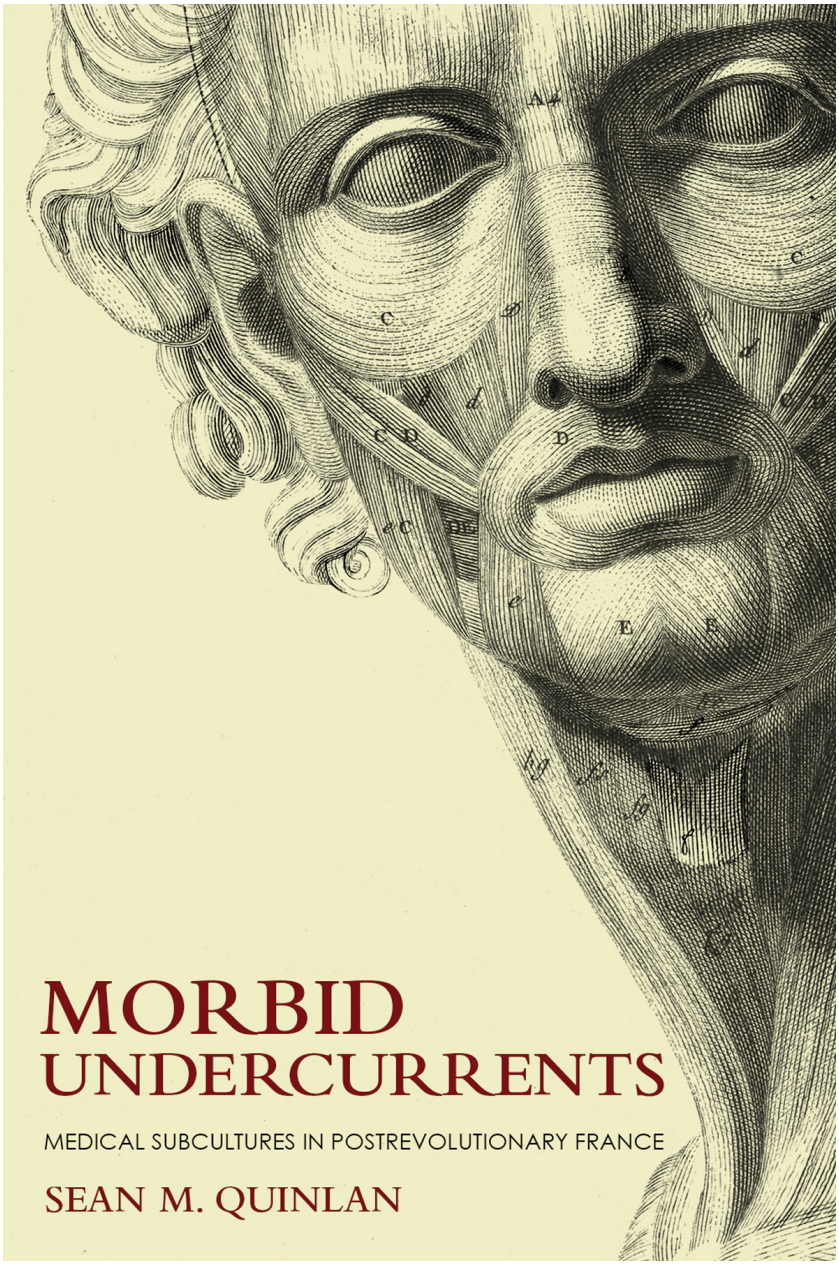

MORBID UNDERCURRENTS

MEDICAL SUBCULTURES IN POSTREVOLUTIONARY FRANCE

SEAN M. QUINLAN

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Abbreviations

AI	Archives de l'Institut
AN	Archives Nationales
ANM	Bibliothèque de l'Académie Nationale de Médecine
BFM	Bibliothèque de la Faculté de Médecine de Paris
ENSBA	Archives de l'École Nationale Supérieure des Beaux-Arts
SRM	Archives de la Société Royale de Médecine

Introduction

Morbid Undercurrents—Medicine and Culture after the Revolution

Medical Paris. The year is 1800, with the fallout from the French Revolution still settling across the globe. This was a time of dictatorship and war. A new empire was being forged, and with the tyranny and bloodshed came underlying fear and uncertainty. Yet it was also a time of great intellectual ferment, above all in the sciences. There was a parade of great names and great accomplishments: Pierre-Simon Laplace's physics, J.-L. de Lagrange's mathematics, Antoine Lavoisier's chemical breakthroughs, Georges Cuvier's comparative anatomy and paleontology, J.-B. Lamarck's evolutionary biology, Pierre Cabanis's physical anthropology, Constantin-François Volney's geography, and Roch-Ambroise Cucurron Sicard's sign system for the deaf and mute. Whole new fields were being born. The ferment was so rich that some historians have called this period the "second scientific revolution," distinguishing it from that first revolution in physics and mathematics that began with Nicolaus Copernicus and Galileo Galilei and culminated in Isaac Newton's vast synthesis. Now, in revolutionary Paris, the scope and rate of change were unprecedented.[1]

Nowhere was this change more dramatic than with the healing vocations—notably the "birth of the clinic" and the new world of the asylum—and because of this fact historians often say that modern medicine was born at this time and place.[2] The overhaul was total. Before 1789, few critical observers would have deigned to call medicine an actual science. Rather, many contemporaries thought that medicine still resembled a corporate guild, one that was hidebound to ideas and habits that dated back to the Middle Ages. A figure as prestigious as the renowned Lockean philosopher Étienne de

Condillac argued that medicine remained stuck in scholastic traditions and "abstract hypotheses," a particular term of contempt used by the Enlightenment philosophes.[3] However diligently some doctors tried to incorporate the new philosophy of Francis Bacon and Isaac Newton into their healing practices, the cold truth, it was said, was that this new scientific learning failed to change how doctors went about purging and bleeding their patients. For these critics, the only things that distinguished a doctor from a quack were his university degree, Latin jargon, and silk stockings.[4]

Tough-minded physicians and surgeons shared these sentiments and called upon their colleagues to reform the learned medical trade. Some sharp-tongued critics even claimed that a state of "medical anarchy" reigned in the French kingdom.[5] One provincial doctor named Duverin minced few words about this state of affairs when he complained to the Société Royale de Médecine, an official body created by Louis XVI in 1776 to advance the cause of medical science. He said:

> Without doubt, there are abuses to correct in the exercise of medicine, abuses that infinitely impede the art of healing and which debase, in some manner, the doctor's authority by preventing him from any improvement and success in his practice, and by keeping people from having access to his expertise when an illness begins, that is, right at the moment when the doctor's perspective is most necessary.[6]

Two decades later much had changed for medical science. The French Revolution had swept aside old institutions and approaches and transformed medical practice. To be sure, ever since the Renaissance, ambitious doctors had promoted the scientific study of the human body and insisted that this study would reveal to them what caused disease and how to cure their patients. In France, by the late Enlightenment, a contingent of reformist doctors had emerged, exemplified by Félix Vicq d'Azyr and Jacques Tenon, all who imagined a new system of medical care, training, and institutions.[7] Now, as the revolutionaries dismantled the old guilds and academies, ambitious reformers seized the moment to turn their dreams into reality.[8] Starting in the mid-1790s, they created new medical schools, overhauled the curriculum, reorganized the medical community by joining together medicine and surgery, and seized Catholic charities and turned them into modern hospitals: no longer poor houses and prisons but rather institutions for medical treatment, research, and instruction. The medical reformers christened these new places *machines à guérir*: "healing machines."[9]

The results were staggering. In this time, medical personnel pioneered what is now celebrated as clinical medicine: disease localization and the correlation of clinical signs and symptoms through ward observation and morbid anatomy practiced in the morgue. The innovations multiplied: Xavier Bichat's and François Magendie's experimental physiology, Philippe Pinel's nosologies and psychiatric treatments, Pierre Cabanis's materialist philosophy and skeptical materialism, and Jean-Nicolas Corvisart's use of primary auscultation in identifying cardiovascular disease.[10] The list goes on. When René Théophile de Laënnec invented the stethoscope in 1816, he created more than a critical technological instrument. Instead, his tool symbolized how physicians had mastered the clinical method and could for the first time peer inside the human body and diagnose

disease.[11] Though some critics, both now and then, have complained that Paris medicine was great on facts but short on cures, most observers celebrated the achievement as a milestone in biomedical progress.[12] Doctors now boasted that they possessed a scientific understanding of life, health, and disease. In an article for the prestigious *Dictionnaire des sciences médicales*, published in 1819, Dr. J.-B. Monfalcon wrote: "Today, doctors are judged as they ought to be: poets, literary writers, philosophers, all know how to appreciate them and accord to them the tribute of praise that they merit so many titles."[13]

For these reasons, the period between the 1790s and 1840s—the time covered in this book—constituted a golden age for French medicine, an age in which French doctors attained unprecedented success and stature. It was also an age in which France itself, above all its capital city of Paris, became a global Mecca for science and medicine.[14] Men and women came from all over Europe and the Americas to profit from French scientific innovation.[15] And, on account of these transformations, doctors found themselves shedding their medieval image—the target of Molière's urbane ridicule—and began assuming a different persona: one of bourgeois authority and respectability. For Theodore Zeldin, the doctor had become the new confessor of the soul; for Michel Foucault, the new priest to the body.[16]

Below this shimmering surface, there flowed unusual undercurrents. Strange things were going on in medical circles, and they rippled through the larger cultural waters. There were odd books. Unconventional attitudes and styles. Bizarre manuals about facial profiling and identifying political types. A new medical genre about the natural history of women and gender mores. Sex manuals for breeding particular kinds of children and then raising them according to preconceived political beliefs. Frankenstein-like efforts to sculpt ideal male bodies out of dismembered morgue specimens. Medical apologias for libertine behavior. Mesmerism and somnambulism and other magical medical cures. A genre of physiological writing that analyzed and satirized new social groups and mores. Paris medicine ignited people's ideas and imaginations, both within and outside of conventional medicine, and thus created a weird science if there ever was one. In this book, these unusual trends have a name: morbid undercurrents.

These morbid undercurrents constitute the core subject of this book. They are not part of the usual story told about the medical revolution in France. At first glance, they seem like odd curiosities, marginal anecdotes that color an otherwise black-and-white epic about scientific heroism and progress, surely not part of the cultural mainstream. Nonetheless, this book will show that these morbid undercurrents deeply affected the literature, arts, philosophy, and social thought of the decades following the French Revolution, helping situate medicine as a central form of cultural experience and understanding. This rich medical corpus, which comprised a complex range of perspectives and persuasions, is best conceived as a cultural countercurrent, a "medicine against the grain," something that swirled alongside the more respectable flow of medical advancements, both intellectual and institutional, that scholars associate with the medical revolution. Moreover, these undercurrents carried medical ideas into the cultural mainstream and then back again, forming a loop that connected an array of groups and

beliefs and opened a wide-ranging dialogue about the relationship between science and culture.

Historians have studied the medical revolution in detail. This historiography dates to the studies by Erwin Ackerknecht, Michel Foucault, and David Vess (among others), which delineated the key figures and accomplishments of the new hospital medicine.[17] Subsequent works have documented the new disciplines and subfields that flowered alongside the Paris clinics, notably with psychiatry, morbid anatomy, surgeons and surgical practice, experimental physiology, medicine and the human sciences, forensic medicine, folk medicine and itinerant healers, hospital care, public health, and the social experiences of medical personnel.[18] These studies have illuminated the epistemological, institutional, and social factors that shaped the emergence and development of modern medicine in France.

That said, historians lack a structured account of how the medical revolution informed larger cultural values and behavior following the French Revolution. A few studies have explored how medicine influenced individual philosophers and writers, notably with Denis Diderot, the Marquis de Sade, and Honoré de Balzac. Much of this analysis has focused upon Old Regime literary culture, as with Anne C. Vila's study on medicine and sensibility or Alexandre Wenger's book on medicine and reading in the Enlightenment.[19] In a similar vein, for French literature after 1800, Lawrence Rothfield has explored the connection between clinical medicine and literary realism in the works of Honoré de Balzac, Gustave Flaubert, and Émile Zola. In his analysis, however, medical influence often appears as a one-way street, one in which writers borrowed ideas and narrative techniques from medical science, and not as a dynamic exchange between science and culture, one in which the cultural and social setting helped shape medical ideas and language.[20]

In the late 1790s, medicine left the somber halls of the universities, clinics, and dissecting labs and permeated vital areas of intellectual culture, including those pertaining to taste and style. Doctors engaged the broader intellectual world outside their professional practice, and laypeople were equally fascinated by the specialist world of hospitals, morgues, and physiology and followed these scientific advancements with wonder and anticipation. Philosophers, novelists, artists, journalists, social thinkers, legislators, jurists: all of them engaged new forms of medical knowledge and used it to understand both themselves and the chaotic world around them. This trend began in Old Regime France, a time when medical knowledge infused elements of literature and philosophy and altered the relationship between books and readers. However, the French Revolution gave this cultural dialogue greater urgency.

After 1789, medicine interested laypeople for reasons beyond technical accomplishments, as it began to address fundamental questions about human nature and experience. This fascination involved more than the personal understanding of health and sickness. Michael Stolberg, for example, has written as to how eighteenth-century people internalized medical ideas about the body and pathology. By reconstructing patient memoirs and medical correspondence, he demonstrated that educated and leisured elites expressed ideas about pain and sickness, more in more, in the biological language of sensibility, especially when discussing neurological disorder and self-pollution, and they

often used these medical tropes to express anxiety and loss (as with the death of a child).[21] By contrast, this study looks at an alternate process of appropriation and internalization. Here, medicine went in a different direction, in some ways looking more outwards, in that it addressed questions about the essence of mind and matter, humanity's place in society and nature, and the best path to right living—for individuals and for groups of people. It helped observers to understand the human condition in all its depth and complexity. Medicine offered *meaning itself*. Those who mastered the medical idiom could penetrate human nature and control or change it.

Consequently, in the midst of revolutionary change, medical knowledge conferred upon its bearers special status and privilege, empowering them to comprehend and master the world of social relations. As David Morris observed, "Like theology in the Middle Ages, medicine in the Enlightenment approached the condition of a master discourse."[22] Similarly, Ludmilla J. Jordanova has identified medicine's mediative qualities in the eighteenth century, showing how it could "speak to and contain implications about matters beyond their explicit content."[23] These interpretations capture something of medicine's importance in intellectual and cultural life, though sometimes scholars can treat medical thought and language as monolithic or hegemonic, or minimize how people draw upon different traditions and understanding when making sense of human experience.[24] One misses the imaginative and corrosive ways in which contemporaries, from all sorts of backgrounds and persuasions, appropriated medical ideas and language to understand the world and make new meanings for themselves.

This book contributes to a growing literature on the cultural uses of science and medicine in the modern period.[25] The term *cultural uses* distinguishes the approach from the established "social uses of science" historiography that Steven Shapin and like-minded historians pioneered in the 1970s and which has studied science and society from Foucauldian or neo-Marxist perspectives.[26] This scholarship treats science as an ideological or hegemonic system that seeks to control individuals or entire groups of people. Science constituted an objectifying gaze or a power/knowledge nexus that supported the prevailing political or socioeconomic order (usually conceived as bourgeois capitalism). The primary focus of this contestation remains the individual's proper body. In Michel Foucault's words: "Society's control over individuals was accomplished not only through consciousness or ideology but also in the body and with the body. For capitalist society, it was biopolitics, the biological, the corporal, that matters more than anything else."[27]

By contrast, the cultural perspective situates science in the shifting world of values and mores and how it intersects with individual agency and personal expression. According to this interpretation, people have employed scientific knowledge not only as a means of control but also as a creative force, one that inspired them to look differently at themselves, nature, and society. Science allowed individuals to envisage the world again and change how they related to one another and their environment. It is true, sometimes, that science bolstered power structures, making it a tool of discipline and control. In other instances, however, science proved more open-ended and emancipatory. It supplied individuals with ideas, values, and experiences that allowed them to examine the world around them and imagine themselves in different terms. At times, it offered

subversive or even radical alternatives to the prevailing order of things. Science inspired people to constitute themselves as autonomous moral agents and empowered them to change their conditions of existence. Sometimes, it was on a grand scale, as with a society-wide regeneration; at other times, it was on a more intimate level, as with forming small groups or communities and promoting values among like-minded people. As we shall see, all these cultural impulses were at work in the medical genres and subgroups of the postrevolutionary period. Ways of knowing, ways of writing, and ways of reading—all three shaped the creation, dissemination, and appropriation of medical ideas in the eighteenth and early nineteenth centuries.

In postrevolutionary France, social and political uncertainty rendered this medical appropriation pressing and poignant. The term *postrevolutionary* itself requires some explanation. It differs from an older way of marking time—the "age of revolution"—which was used by prominent historians such as R. R. Palmer, Eric Hobsbawm, and J. L. Talmon, each of whom wanted to characterize a century of political and social upheaval.[28] It is a term that features in Jan Goldstein's study on the "post-revolutionary self," though her analysis itself spans the period from 1750 to 1850 and largely refrains from defining the term or developing it as an analytic category.[29]

In this book, postrevolutionary signifies more than a chronological expanse, a way of marking the tumultuous era between 1789 and 1848. Following the insights by Suzanne Desan and Ewa Lajer-Burcharth, postrevolutionary describes a general mindset, a particular *Zeitgeist* found in a society that had undergone bloody war and revolution and had to confront changed realities in daily life, whether in governing authorities, new social elites, laws, institutions, moral values, cultural trends, or traumatic memories.[30] Postrevolutionary captures something of France's fragmented nature, a society in which no cultural consensus had emerged following the events of 1789. In this setting, the French Revolution became a contested touchstone for culture and memory, lurching between partisans who saw it as divine liberation and detractors who saw it as a demonic catastrophe.[31]

For people who lived through these dislocating times, traditional society had fallen apart—the "centre could not hold," to quote William Butler Yeats—and so all the old values and all the old stories, rooted in the monarchy, church, and feudal order, no longer gave people a concrete sense of meaning and place. Without these old values and stories, educated people looked elsewhere to explain a rapidly changing world. In the France of this time, people no longer shared a common perspective and purpose, and so they disagreed fundamentally about the nature of the world. The prominent Eclectic philosopher François-Pierre Maine de Biran, himself an astute observer of medical practice and innovation, summed it up this way: "Nobody directs or influences; everybody surrenders to chance or to providence, sensing that men do not act."[32] Elsewhere, the writer Joseph Joubert confided in his notebooks that, "The century felt it was making progress by falling into the precipice."[33]

In this epistemological vacuum, medicine offered an answer to many contemporaries, giving them a tool to explain human nature and to act within society. It was both scientific and dispassionate, yet also intimate and tactile, no doubt owing to its closeness to the body and private experience. The medical writers encountered in this book,

whether formally trained or not in medicine, used medical ideas, language, and writing to justify their own particular political, social, and moral values (which were often different and opposed to one another). It gave them an objective language with which they could talk about revolutionary change, and it helped them make sense of the disparate and dislocating events in their lives. In this regard, medical knowledge provided a conceptual metaphor that allowed doctors and laypeople to understand bewildering sociopolitical changes and give themselves a feeling of agency and control over their lives. It helped them express their thoughts and concerns about the current state of things in France. They hoped to find like-minded readers, or to change or influence other people's opinions and beliefs, or to register their point of view in the broader intellectual community.

However, what is critical—and I emphasize it throughout this book—is that no single outlook, political vision, or value system determined these medical appropriations. Instead, what marked these medical undercurrents was the bewildering diversity in perspectives and attitudes. What *did* unite them was that medicine provided writers and readers a common language and set of ideas; it was a shared way of talking about ever-shifting social and political realities, even though it sometimes countered the official or serious world of scientific medicine.

Gender remains an integral part of this story, though it intersected with medical writings and subcultures in complicated and sometimes paradoxical ways. As scholars have established, the family became a central locus of power and contestation during the French Revolution. Whereas revolutionaries initially pioneered new ideas about human rights and the family—notably with women, children, inheritance, and even sodomy laws—they became more conservative, if not reactionary, after the Reign of Terror. Legislators and intellectuals hoped to reconstitute political authority along paternalistic and familial lines and crafted new laws and ideologies to restrict women in their public and private lives.[34] These backlash politics stemmed from deep-seated anxieties, many of them dating from the Old Regime, regarding women and perceptions of natural gender roles. Revolutionary experiences associated with feminist politics and female activism intensified these misogynistic attitudes. Importantly, biomedical discourses shaped official views about gender roles and provided scientific rationales to exclude women from civic and civil life.[35]

The following analysis reinforces aspects of this understanding but, building upon recent historiography, it complicates this story by showing the diverse and often conflicting views found in biomedical writings on women, gender, sexuality, and the body after the French Revolution. Patriarchal and misogynistic impulses notwithstanding—and these impulses were strong and widespread—medical and lay writers sometimes offered rebellious, subversive, and even comic takes on gendered norms and behaviors. Rejecting mainstream or coercive attitudes, they explored and interrogated the roles that mainstream society expected women, men, and children to play in postrevolutionary France. If they failed to offer concrete alternatives, they did, at times, underscore prevailing prejudices and pointed to the abuses that should be changed.

Nor were medical writings alone in this regard, as recent historians have suggested. For instance, in the wake of national defeat and imperial loss, France witnessed a *mal du*

sexe regarding gender norms, especially with Romantic ideals and transgressive behavior.[36] Similarly, in the post-Enlightenment period, the family became a site of experimentation and affective change, and sometimes in emancipatory and countercultural ways.[37] Starting in the 1800s, leisure culture—the world of recreational parks, swimming pools, public gyms, and schoolyards—also offered transgressive and liberating opportunities for men and women.[38] This gender instability also fueled mainstream anxieties and phobias and intersected with the marked anti-feminist backlash of the postrevolutionary decades. Nonetheless, contemporaries did proffer dissent and alternatives, even if transitory and incomplete, against the world of bourgeois patriarchy.

Here as elsewhere, medical science emerged as an ideologically malleable force. It was a discursive element that could be appropriated by people from different social backgrounds, political persuasions, and religious temperaments. It is at this point that medical appropriations intersected with the postrevolutionary mindset. Not only did postrevolutionary realities open possibilities for medicine, as a form of cultural authority; it also provided a fragmented, heterodox space that allowed different subgroups and cultural undercurrents to germinate and flourish.

Let me briefly introduce the dramatis personae in this story. The first set of characters constituted the elite doctors of the Paris medical establishment. Chief among them was Pierre Cabanis, the noted physician, writer, and politician, who helped pioneer physical anthropology and was one of the so-called Idéologue intellectuals clustered around the newly formed Institut National. Close to him stands Xavier Bichat, the passionate young anatomist and physiologist, who pioneered histology and pathological anatomy, and whose experimental virtuosity astonished the Paris intellectual scene. Besides these two figures—crucial for nineteenth-century intellectual developments, above all in the work of Arthur Schopenhauer—two other physiological writers stand out: B.-A. Richerand, the noted author and medical professor, who circulated in Paris high society and underwent a late political and religious conversion, as well as François Broussais, the radical materialist and flamboyant socialite, whose spectacular bleeding regimens—notoriously achieved by applying copious numbers of leeches—became legendary among his wealthy patrons. Two other like-minded figures enter this story: the controversial Viennese physician Franz Gall and his disciple Johann Gaspar Spurzheim, who were both well-known for their reductive and materialist studies of the brain and nervous system (including the more dubious science of phrenology). Finally, there were psychiatrists such as Philippe Pinel and J.-E.-D. Esquirol, who helped pioneer psychiatric treatments and who captured the public imagination with their theories of mental alienation.

However, other doctors, less celebrated today, shaped mentalities and opinions, and their works resonated in the intellectual circles of the times. J.-L. Moreau de la Sarthe and J.-J. Virey were consummate popularizers, writing extensively about medicine and natural history and preaching how medical knowledge could unveil human nature and improve society. Louis Robert and J.-A. Millot wrote best-selling books on sex and procreation, and although historians sometimes cite them as eugenic precursors, their writings were often sly, salacious, and subversive (Robert, as will be seen, nursed progressive views about women's health and education). J. Morel de Rubempré, who followed Moreau de

la Sarthe and Virey, sought to proselytize new medical ideas, above all those relating to health and hygiene, and he even turned to writing about subjects as controversial as demimonde sexuality and radical politics during the July revolution of 1830.

In a different vein, Jean-Galbert Salvage, a doctor–anatomist and former Jacobin, sculpted ideal neoclassical forms from decaying morgue specimens. His gruesome statuary forms electrified the Paris art scene in the early 1800s and elicited praise from artists such as J.-A. Houdon and J.-L. David. Meanwhile, some of his colleagues, most notably the Suë father-and-son duo of artists–anatomists, taught a generation of fine arts students the principles of anatomical science and engaged the dominant political and aesthetical opinions of the time. On the other side of the spectrum, J.-L. Alibert, the noted dermatologist and director of the Saint-Louis hospital, regaled fashionable readers with his engaging (and sentimental and conservative) portraits of the human emotions, which he illustrated with novelistic case examples drawn from his patients.

These doctors, whether illustrious or not, attracted fellow travelers within lay circles. Although not licensed as physicians or surgeons, these writers steeped themselves in medical ideas and their works found readers in erudite medical and scientific circles. Significantly, they sometimes drew from spiritualist, occultist, or "magical medical" trends and were associated with the groups surrounding Franz Anton Mesmer, Alessandro Cagliostro, and Johann Kaspar Lavater. In this setting, J.-M. Plane promoted physiognomy to profile specific political types, notably former Jacobins and other radicals, and all the new urban characters who inhabited postrevolutionary Paris. The physician Jacques Petetin, the Marquis de Puységur, and the naturalist J.-P.-F. Deleuze resurrected magnetic, galvanic, and mesmerist ideas and applied them in significant but sometimes misunderstood ways. Their works affected how contemporaries viewed the relationship between mind and body—as seen, most notably, with the spiritualist philosopher Pierre-François Maine de Biran.

These morbid undercurrents permeated a more familiar intellectual coterie. In their midst, one finds literary figures such as the Marquis de Sade, the infamous aristocrat and libertine writer, who spent much of his later life in prison or insane asylums, expounding his bleak materialist philosophy about human nature and emancipation, and for whom medical knowledge provided a powerful tool for liberating human sense and sensuality. Then there was the old Enlightenment poet and moralist Jean-François de Saint-Lambert, who scandalized high society with his liaisons with prominent women *philosophes* and *salonières*, and who used medicine to articulate an Epicurean vision of human nature. Lastly to this mix belongs J.-A. Brillat-Savarin, the founder of French gastronomy, who maintained a serious interest in medicine and chemistry, and who socialized with prominent physicians such as Richerand (while himself regretting a potential vocation in medicine).

Most strikingly, the realist novelist Honoré de Balzac plays a role in our story. Balzac was fascinated by scientific questions regarding the human will and creative vitality, and these interests drew him to the same scientific subcultures that attracted Utopian socialists such as C.-H. de Saint-Simon and Charles Fourier and the sociologist Auguste Comte. Balzac drew upon these self-same medical fads as he wrote his early novels and formulated his aesthetic principles and they stamped the form and scope of his massive

Comédie humaine.

This book, as emphasized above, studies the relation between medicine and culture in postrevolutionary France and how medical subcultures permeated the broader intellectual world of the time. I must further define, if in schematic terms, what is meant by the words *culture* and *subculture* so to clarify critical elements of the analysis and establish the contours of this cultural exchange.

The term culture should avoid two associations. First, with culture, the analysis eschews the rarefied sense of high culture as defined by traditional literary thinkers such as Matthew Arnold and T. S. Eliot. This form of culture, as Arnold described it, constitutes "the pursuit of our total perfection by means of getting to know, on all matters which most concern us, the best which has been thought and said in the world."[39] Setting aside any polemic over the value of distinguishing between high and low culture—Peter Burke has summarized these debates in his classic book on mentalities in early modern Europe[40]—readers will find that few of the ideas and writings in this book constitute the "best which has been thought and said in the world" (with some notable exceptions). In what follows, the ideas and writings matter because they reveal much about values and attitudes in postrevolutionary France and how medical science informed and shaped the mindset of the educated classes.

Second, when speaking of culture, I avoid the word's broader, more anthropological meaning in which culture denotes symbolic interactions or the deeper structure behind quotidian existence. Here, in the words of E. B. Tylor, culture (or "civilization") encompasses "that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man [*sic*] as a member of society."[41] As Peter Worsley points out, culture subsumes not just "ideas" but also "values and forms of behavior."[42]

For present purposes, this anthropological definition of culture remains too broad. Though medical knowledge did become a conceptual tool with which people interpreted their present world, one cannot say that it permeated the whole of French society. It was absent among the urban popular classes, for example, as well as the broad sweep of rural life, which constituted the primary reality for most French people of the time. Instead, medical science spoke to particular members of the literature and leisured classes—and even then, one cannot characterize this understanding as clear-cut, homogenous, or even "hegemonic" in the sense that it represented a form of class consciousness derived from social stratification.

As a consequence, I use culture to describe something akin to what Ernst Cassirer has called the "expressive" or "representational" sphere of symbolic forms. According to him, these expressive forms allow people "to understand and interpret, to articulate and organize, to synthesize and universalize [their] human experience."[43] In his important study of capitalism and culture, sociologist Daniel Bell has built upon Cassirer's understanding and defined culture as "those efforts, in poetry, painting, and fiction, or within the religious form of litany, liturgy, and ritual, which seek to explore and express the meanings of human experience in some imaginative form." To these imaginative forms, Bell also added "cognitive modes" of understanding, above all those associated

with science and philosophy, "which surely belong within the realm of culture."[44] In this sense, then, culture denotes the ways that people try to grasp human experience and make sense of it, thereby expressing the human condition imaginatively and analytically. One might include medical thought and practice in this definition. Medical knowledge provided analytic forms of deciphering the new world of postrevolutionary France or somehow gave a creative outlet to express beliefs and attitudes, whether conscious or not, about this new sociopolitical and cultural landscape.

Nonetheless, these symbolic forms, as described by Ernst Cassirer and Daniel Bell, were not suspended in time or place. Instead, they were formulated and expressed by particular groups in specific settings: the literary and fashionable world of urban readers, broadly defined. At this time, the French had a name for these literary and leisured types: *le monde*. By this, contemporaries meant, quite literally, *everyone*—"the milieu of those who find it important to be in fashion, the orbit of those aristocrats, wealthy bourgeois, publishers, writers, journalists, impresarios, performers, who wish to be 'where things happen,' the glamorous but small world of that creation of the nineteenth-century metropolis, *tout le monde*, Everybody, as in 'Everybody says.' "[45] It was lodged, as David S. Shields has suggested in his study of British American culture, somewhere between the courtly society described by Norbert Elias and the new bourgeois public sphere theorized by Jürgen Habermas.[46] Doctors belonged to this topsy-turvy world and hobnobbed within it, sharing their ideas and insights with their colleagues, peers, and patrons. In this setting, culture functioned not just as a means of expressing and analyzing experience. Rather, it distinguished status and authority, giving people a mark of distinction: culture as style, culture as taste, culture as a marketplace.

However, these literary and leisured types—for whom culture marked status—were not a monolithic group, and this heterogeneity is essential for grasping the medical undercurrents described in this book. This readership constituted a group or a "literary field" that was diverse, fragmented, and antagonistic in its ideas, values, and social background.[47] In other words, this group rarely shared the same opinions or got along and behaved cohesively. More than personal idiosyncrasy often shaped this group diversity, though this was true in several cases; rather, it was born from concrete political and social experiences. This intellectual scene sheltered an array of competing groups and interests: *ci-devant* aristocrats, returned émigrés (aristocratic refugees from the French Revolution), embittered priests and religious, new Napoleonic elites, ex-Jacobins, middling republicans, and opportunistic moderates, many of whom had been somewhere and done something during the revolutionary period and who held competing claims over power, property, privilege, and personal status. Interest was paramount. Within this group, people harbored understandable and powerful sentiments of entitlement and grievance—and from multiple perspectives—including selective memories about past deeds and attitudes.[48]

Not surprisingly, political sensibilities also divided this cultural-social group in charged ways. Within literate and leisured society, many divergent political constituencies existed: constitutional monarchists (so-called "doctrinaires"), moderate liberals ("independents"), democratic republicans, Jacobin sympathizers, imperial bureaucrats, royalist

reactionaries, and Catholic ultramontanists. Moreover, these constituencies expressed an array of philosophical views, ranging from radical materialists to traditionalist Catholics, with enlightened deists, agnostics, and romantic spiritualists in between, all whose intellectual principles seldom matched avowed political beliefs exactly.[49] For these reasons, the analysis avoids equating intellectual culture with political ideology or "hegemony," as if culture constituted "ideas and beliefs (whether true or false) which symbolize the conditions and life experiences of a specific, socially significant group or class."[50] This characterization is imprecise for two reasons: while *le monde* constituted a "socially significant group or class," its social constitution was fragmented and variegated, and its members agreed upon few "ideas and beliefs." Hence the salient appeal of medical knowledge.

Just as importantly, the medical community itself was diverse and conflicted, as well. In the early 1800s, doctors and surgeons failed to constitute a coherent "profession," as sociologists define that term today, except that the French government had enacted legal measures to determine who could and who could not practice medicine (and where). Still, these legislative efforts highlight the complexity of medical practice in postrevolutionary France, not least because of the difficulties public authorities faced when they tried to regulate the medical trade.

During this time, four distinct types of medical practitioners were operating side by side. First, some doctors and surgeons received their certifications under the Old Regime's guild system; second, some had earned their medical credentials during the so-called period of medical anarchy in which the government in a grand laissez-faire experiment abolished all trade restrictions and privileges, including professional licensing; and a third group took their degrees in the early years of the clinical revolution (1794–1803). Lastly, some doctors and surgeons were certified under the two-tiered system that emerged under Napoleon. This law distinguished those licensed doctors who held advanced medical degrees and training (and could practice the full range of medicine anywhere in France) from lower-level "health officers," who had finished an abbreviated program of study and who could practice limited forms of medicine in specific places.[51] In the French literary canon, the best-known of these health officers was the bumbling and ineffective Charles in Flaubert's *Madame Bovary* (1857). In this fraught setting, doctors, surgeons, health officers, and apothecaries competed against one another and jockeyed for position in finding patrons and clients. Interests and values could get at cross-purposes, and personal authority could come into question.

Given these social realities, one can best approach this rich and diverse sociopolitical and cultural mosaic as an interlocking world of subgroups and subcultures. In a classic paper, Albert K. Cohen argued that recurrent social changes—what he called "situations"—produce new social groups and these groups, in turn, produce new cultural standards and status symbols that allow them to distinguish themselves, identify like-minded people, and create shared values and larger communities.[52] Though these subcultures often constitute "subdivisions" of a larger national culture,[53] they integrate important elements of the dominant culture, using its "ideas and symbols" to fashion its own "primary realm of experience," as David Sorkin observed in his study of German-Jewish culture in the nineteenth century.[54]

Significantly, people engage in subcultural activities when they feel unable to express their social and political aspirations, or when they are blocked from participating in their broader culture and public life. In this regard, as Anita Harris has suggested, subcultural values and practices provide a "free space" in which people can express and assert their personal values. This free space allows them to forge personal bonds with others and resist prevailing norms and values.[55]

These sociological insights are valuable because they help illuminate the interplay between medicine and culture in postrevolutionary France. In the period between the late 1790s and the 1848 revolutions, which encompassed the Directorial Republic, the Consulate, the Empire, the Restoration, and the July Monarchy, official culture was rooted in either authoritarian or conservative values, with successive governments curtailing political participation and the free expression of individual ideas. Nonetheless, contemporaries challenged these values and rendered cultural authority tendentious and uncertain. One sees subcultural views and behaviors emerging, for example, with the bohemian aesthetic groups that started appearing under the Directory (such as the Barbus); an array of sectarian, occultist, and spiritualist groups (such as the Martinists and Swedenborgians); and the myriad secret societies and conspiratorial clubs (which started when F.-N. Babeuf planned to overthrow the government in 1797). Doctors and like-minded intellectuals participated in this trend, ranging from Bichat's young coterie to Salvage's fellow artists and students.

Finally, this fragmented, disjointed cultural realm forces a reconsideration of a sociocultural process that scholars have come to associate with modern medical science: namely, the relationship between "medicalization" and "professionalization."

"Medicalization" designates how medical ideas and tools have permeated a given society. The term can denote, on the one hand, how professional medical care and services are diffused among a particular group or population, or, on the other hand, how medical ideas about health and sickness inform broader cultural values and entice people to seek out professional medical care (in contrast to traditional or alternative forms of treatment).[56]

For the first, scholars measure medicalization by quantifying a population's access to medical care and institutions. For example, one can establish the precise doctor–patient ratio or assess the availability of medical services in a given area (such as clinics and hospitals). Medicalization, in this sense, constitutes a demographic–geographic problem concerning medical access, one that scholars can establish by using sociostatistical methods. It is an essential approach for understanding the realities of health care distribution, above all in developing and rural regions.[57]

By contrast, when scholars study the medicalization of ideas and behavior, they explore a complex but more nebulous process of cultural diffusion. Under this form of medicalization, medico-scientific elites describe human experience in medical terms—childbirth, disease, emotional states, death, and so on—while laypeople—who possess but a partial understanding of these ideas—come to accept these expert claims about health and disease as true and valid. In this regard, scholars speak less of how a society transmits medical values than how laypeople submit to them.[58] Accordingly, medical

power and authority depend less upon cognitive insight or therapeutic success (that is, that the doctor can diagnose and cure a sick person, or that person can understand the reasons behind the curative regimen), than upon domination and force: how doctors have monopolized healing practices through legal professionalization and then chased their competitors out of the marketplace.[59] Modern healing techniques, in this sense, constitute more of an "imperative" than a desired good.[60] Often, in these analyses, scholars follow the critical insights of Michel Foucault and Ivan Illich, among others, both of whom argued that medical authority emerged from a hegemonic struggle for power, one in which techno-science helped entrench the values and interests of ruling elites. In this "medicalization of life," as Illich has called it, ordinary people lose control over their bodies and minds—and even surrender their right to die.[61]

Both approaches to medicalization, however, pose challenges for the intellectual and cultural historian. The sociostatistical approach, for example, provides essential facts and figures about the distribution of medical care and can thus tell scholars much about the realities of medical practice and institutions. However, this approach does not capture what people think or experience in their dealings with medical personnel, or how they internalize ideas about health and disease and then integrate them into their understanding of the world.

The social control approach, by contrast, explains how authorities frame physical, mental, and social processes in medical terms, and it emphasizes the strong moralizing, didactic, and even dehumanizing tendencies sometimes found in modern medicine. However, when following social control models, scholars can overlook creative and subversive trends in medical culture and thus neglect how medical discourse can inform conflicting interests, politics, and social positions—and how it can even empower or liberate people.

In saying this, the present analysis does not ignore how modern medicine can sometimes constitute a normalizing, moralizing, or dehumanizing force in contemporary society, nor does it deny that social stratification can shape the means and ways of medical practice and authority. Both elements characterize French medicine of the early nineteenth century. Nonetheless, these social control approaches can overstate the ideological coherence of medico-scientific thought and thus overlook how these discourses played out in specific historical settings. In France of this time, medical knowledge and authority were not monolithic, even if its practitioners sometimes espoused identifiable political projects or social agendas. Many historical agents appropriated medical expertise for their private purposes and saw it both as empowering and liberating. For them, to know one's body was to know how better to use and experience it in new and more profound ways. As much as the Marquis de Sade rejected the moralizing elements in medicine, he insisted that knowing your own self meant that you had to understand your own body—and medical science played a crucial role in the project of self-illumination.

For these reasons, I treat medicalization as an open-ended cultural exchange, following Emma Spary's observation about the "increasing embrace of the medical by lay people."[62] In this time, medicine permeated art, literature, philosophy, journalism, and even politics, and it showed itself to be a creative and malleable force in French cultural

life. Medical science was less *hegemonic* than it was *dialogic* (to borrow from Mikhail Bakhtin).[63] It uncovered more than sickness. Instead, medicine could explain the mind and body and the human person's complex relation between society and nature. Medical science fascinated contemporaries because it addressed a major question: what it meant to be human and why people thought and felt and did the things they did. Here the medical "gaze," as theorized by Michel Foucault,[64] appears less as a tool to objectify people than as a way to look at things—a "take" on the mystery of human experience.

In my book, I have combined a thematic and narrative approach, focusing upon specific case studies in which medicine served insistent ideological or cultural purposes in postrevolutionary France. I want to capture something of the rich diversity and unpredictability of these writers, genres, and subcultures. In some ways, I have followed the advice found in Lytton Strachey's classic *Eminent Victorians*, in which he urged that "human beings are too important" for historians to treat them "as mere symptoms." Rather, he said, "explorers of the past" should approach their subject matter by rowing "out over that great ocean of material, and lower down into it, here and there, a little bucket, which will bring up to the light of day some characteristic specimen, from those far depths, to be examined with careful curiosity."[65] Like Theodore Zeldin, in his "intimate portraits" of historical subjects, I have preferred "juxtaposition" to cause-and-effect when examining these specimens. I have avoided causal relations and sociological abstractions, all of which can force human experience into molds and patterns that can obscure their deeper complexities, ambiguities, and surprises. As Zeldin reminds: "the more individual people are studied in detail, the more complex they reveal themselves to be." In his words, individuals "can behave, depending on the circumstances in which [they] find themselves, in ways which may appear contradictory, and they hardly ever become quite predictable."[66]

I have, therefore, chosen my material selectively. Though other speculative or subversive medical trends existed—phrenology, galvanic societies, magical or astrological medicine, or utopian socialism—I have treated them insofar as they illuminate the specific medical undercurrents explored in this book. I have sacrificed a comprehensive portrait so I could analyze better the underlying mechanisms and show how medical subcultures and broader sensibilities intersected with one another in this period.

To put my subject matter in more definite relief, the chapters highlight the continuities and connections between individuals and ideas in the flow of these medical undercurrents. Each chapter introduces a particular medical genre or cultural phenomenon and then uncovers a broader set of issues and themes, all of which I address in an interdisciplinary fashion, extracting the complex dynamics of cultural transmission and appropriation. In these case studies, I clarify the progression of ideas—from Sade's libertine medicine and domestic politics to new ideas about women and the family, the profiling and labeling of new political types, the breeding of children and teaching them specific ideological values, the search for ideal body forms, the use of willpower and occult forces to control health and disease, and, lastly, the creation of an entire medico-literary genre—to analyze the social and political realities of postrevolutionary society. In all of this, medicine constituted an ideologically malleable force, one that was creative

and dynamic in imagining body, self, and society in a rapidly changing world.

Though these medical writers had different subject matter and personal agendas, several core assumptions formed the wefts and warps of this cultural tapestry. Four threads seem crucial. Foremost, medicine appealed to individuals because it promised to understand the true nature of other people, providing a more in-depth analysis of human experience. This approach sometimes comprised an abstract or philosophical level, as with the medical science of man, or it became more practical or applied, as with deciphering specific individuals or entire groups of people. Examples appear with physiognomic profiling or the new "physiological" literature of trends and types.

From here, writers moved from human nature to study broader social relations. In such moments, they debated human progress and perfectibility—all points raised, for instance, in books on sexuality and domestic hygiene. At the same time, medicine inspired contemporaries to experiment with new ideas and behaviors, thereby combining values, bodies, and experiences in sometimes startling and destabilizing ways. One sees these impulses with Sade's sexual utopias, Salvage's grisly morgue experiments, or the bizarre and dramatic magnetic cures employed by Puységur and his followers.

Lastly, medical knowledge allowed individuals to think about changing gender roles and perceptions and thus short out domestic arrangements and hierarchies, particularly among cultural and social elites. This agenda informed the natural history of women of Cabanis and Moreau de la Sarthe. However, it also included Sade's family politics and the different gender ideals explored in Alibert's and Balzac's literary physiologists. In all these genres and subcultures, medicine allowed contemporaries to reckon with postrevolutionary realities and act within this new cultural and sociopolitical world.

Throughout, the narrative arc of this book shows how doctors and writers wove together an array of traditions, intellectual styles, and different readerships over the postrevolutionary decades. In their writing and debates, they combined medicine and literary genres, readers and visual audiences, political activists, fashion makers, and even religious and spiritualist sensibilities. These writings engaged the world of postrevolutionary culture, in which doctors and writers used medicine in creative and sometimes subversive ways, as they appropriated medical discourses for their purposes. Medical ideas and language thus became dynamic and unpredictable forces for talking about the cultural world of postrevolutionary France, transcending simple political, ideological, and social allegiances. However, our story begins several decades earlier, in the middle years of the eighteenth century, with new ideas about medical authority and new forms of social critique and radical science. It is to this background the analysis must first turn.

CHAPTER 1

Settings

The Cultural World of Medical Practice, ca. 1750–1800

In 1805, Nicolas-Marie Clavareau published an illustrated book on the new hospital system in Paris in which he praised the astonishing growth of medico-scientific knowledge in the revolutionary years. "Having attained the highest point of glory by the courage of its defenders," he wrote, "France astonishes the universe again by the admirable system of its institutions"—so much, in fact, the government had abolished the word "impossibility" from its vocabulary.[1] Hyperbole aside, Clavareau's opinion was shared by leading physicians and observers. Evoking the "vivifying spirit of liberty," Pierre Cabanis wrote,

> Medicine has strongly experienced this regenerating moment. Already its instruction and methods have assumed a new character. The philosophic spirit of the century has given both more grandeur and greater precision: applying greater exactitude in experience, one has begun to apply more useful discoveries furnished by the other sciences. Finally, the present health schools offer to the fatherland distinguished students, whose beginning announces that the art will rapidly make new advancements.[2]

Such, at least, were the hopes that the new Paris hospitals engendered. The so-called medical revolution transformed the status of medicine in France, in all its epistemological, institutional, and professional dimensions. It pioneered new ways of

studying disease, of training and socializing medical personnel (thereby giving them a unique *esprit du corps*), and of deploying institutions such as the hospital and the morgue to cultivate a new theory of disease localization. These innovations did more than change how doctors saw disease and treatment. They also changed how laypeople perceived doctors and medical science, as well as the new institutions associated with clinical medicine. This broader awareness, I argue, stimulated public interest in medicine and helped proliferate medical undercurrents, with all their different genres and subcultural qualities, in the postrevolutionary years.

Nonetheless, the new Paris medicine did not spring forth fully formed as though spontaneously generated from revolution and war. Historians stress that the medical revolution emerged from older theories and practices that had been incubating over the long eighteenth century and that transfigured how doctors understood diseases and the body. This fact applies to the medical undercurrents of the postrevolutionary period, many which originated in the Old Regime and expressed themselves in a trend that historians call "radical" or "prophetic" science. This prophetic current was intensified by the Revolution itself. It inspired more egalitarian visions of science and society, on the one hand, or incited vandalism and violence against people and institutions, on the other.

More so than the physical sciences, medicine strongly appealed to educated people because it probed the relationship between individual, society, and nature. It promised not just distant glimpses of the cosmos or abstract mathematical theorems but real applications and progress in human affairs. The doctor was no longer a risible empiric, like the one in Gerrit Dou's famous painting, staring darkly into a globe of urine. Instead, he was a man of science and a man of progress, one gifted with a new halo of intellectual authority.

This chapter examines the settings and precedents that inspired the medical undercurrents of the postrevolutionary period. In addition to the new clinical medicine, I should emphasize three other long-term developments: the emerging figure of the *médecin-philosophe* and the science of man tradition of the mid-1700s; the rage for popular or prophetic science that gripped literate society in the 1770s and the 1780s; and, lastly, the utopian dreams about physical and moral regeneration that inspired revolutionaries to fashion a new man and society. These influences rarely progressed from one another in a linear unfolding of ideas. Instead, they maintained overlapping spheres of influence and formed a sort of Borromean ring in whose center emerged new genres, readers, and subgroup behavior.

At this point, the analysis must step back and consider clinical medicine as one of a set of interlocked cultural developments. The new respect accorded medicine, as extolled by Cabanis and his fellow practitioners, reflected more than greater technical skills and knowledge. There were other factors at work, but it is a story, like the clinical revolution itself, that began in the mid-1700s.

Medicine held a mixed reputation in eighteenth-century life. In France, as was common elsewhere in Europe, medicine divided itself into three different guilds, each of which maintained its privileges and prerogatives. The doctors diagnosed diseases and prescribed remedies and other courses of treatment and, by virtue of their university

degrees, stood at the apex of the health care pyramid. The apothecaries learned the *materia medica* and sold remedies or mixed them under medical prescriptions. Finally, the surgeons trained as manual craftsmen (like any other skilled worker) and performed operations and other hands-on procedures.[3] It was they, the barber surgeons, who formed the rank and file of the medical world and constituted a kind of "ordinary practitioner," serving the needs of the population at large. Rooted in the corporate structure of the Old Regime, each group guarded their monopoly status, not just from charlatans and folk healers, but from each other, as well—an attitude which, as critics alleged, stifled innovation among them all. In the 1740s, for instance, turf battles between doctors and surgeons became so pitched that critical observers concluded that medical practitioners, irrespective of their field, were more concerned with their "special interests than with the care of the sick."[4]

Over the eighteenth century, the old guild structure unraveled, leading to a perceived state of "medical anarchy." The sharpest critics came from within the medical community itself, revealing how doctors themselves approached their own authority with skepticism. In one mid-century manuscript, for example, a Parisian physician complained that medicine's "three species of republics" had fallen into shambles. Accordingly, doctors distributed remedies, druggists practiced medicine, and surgeons brazenly dabbled in both. Each guild neglected its "proper state." However, the real victims were the patients. Across the kingdom, he said, a million people agonized and begged for relief. Little wonder these patients turned from trained practitioners to unscrupulous quacks and mountebanks.[5] From the region around Caen, another medical professional, a certain Dr. Le Secher, denounced the "jealousy," "hatred," and "intrigue" exhibited among the medical guilds and said that this professional backbiting caused the "fine arts" to degenerate. Like his fellow critic from Paris, Le Secher alleged that this attitude spurred the rise of irregular medical practices.[6]

Some reformers hoped that the royal government would put the medical house in order, calling out the troublemakers and setting up new regulations. These hopes seemed realized in 1774–1776 when Louis XVI created the Société Royale de Médecine. The Société Royale was the brainchild of two figures: the finance minister A.-H.-J. Turgot, one of the great economic reformers and a friend to the enlightened philosophers; and Félix Vicq d'Azyr, the lauded comparative anatomist and champion of scientific medicine.[7] When justifying new institution, Vicq d'Azyr promised that it would promote broader dialogue and transparency between practitioners. Frank self-assessment, he felt, would accelerate medical progress.[8] These views were not unique. For example, leading hospital crusaders such as Jacques Tenon and Nicolas Chambon de Montaux expressed similar ideas in the 1780s and looked to new leadership for reform.[9]

The French Revolution gave doctors a forum. In 1790, Vicq d'Azyr submitted a plan to the National Assembly in which he proposed to regenerate the entire health care system. He asked the royal government to do many things. New laws should standardize the medical curriculum; eradicate old guild prohibitions by unifying medicine and surgery; regulate pharmacopeia and the proprietary remedy trade; improve sanitary conditions in the countryside; and, last, outlaw irregular medical treatments.[10] Almost a year later, under the new republic, Dr. Jouilletin proposed a similar project, hoping that medicine

could attain the sophisticated rigor found in physics, mathematics, and the new chemistry.[11] Though not implemented, these blueprints inspired the reforms wrought by Antoine Fourcroy and Pierre Cabanis during the Thermidorean and Directorial republics.

However, not only doctors complained about the lack of medical skill. Laypeople, for their part, expressed skepticism or hostility.[12] Leading philosophers, ranging from Thomas Hobbes to the Baron de Montesquieu, alleged that medicine killed as many people as it cured; and in one edition of the *Encyclopédie* of Jean Le Rond d'Alembert and Denis Diderot, one author said that the world would be a better place without medicine.[13] In this litany of grievances, the worst offenders were the Paris medical professors and their supporters in the Paris Parlement, the former who were reputed for their extreme conservatism.[14] Pierre Choderlos de Laclos summed up these attitudes in his *Les Liaisons dangereuses* (1782), when the Madame de Volanges noted that medical consultation was, "as you know, more often a proof of danger than a means of help."[15]

Ordinary people also doubted medical competency. In the countryside, peasants and laborers dismissed academic medicine as intrusive and ineffective. Sometimes they treated rural practitioners with violence, above all in times of pestilence or dearth.[16] To cite but one example: in the 1770s, during a dysentery epidemic, one country doctor complained that peasants believed that "there was no good remedy except the one that heals promptly." They preferred to die, he said, with a wine glass in their hand than with an enema tube up their behind.[17] Elsewhere, doctors railed at how peasants disrespected qualified practitioners and trusted instead charlatans, quacks, and other folk healers.

In other quarters, opinion was changing. Increasingly, educated people admired doctors and trusted medical science, finding within it a new enlightened spirit. "For the observant man in the eighteenth century," the historian Peter Gay wrote in an oft-cited passage, "philosophes as well as others, the most tangible cause for confidence lay in medicine.… Medicine was the most highly visible and the most heartening index of general improvement." For these enlightened cognoscenti, Gay continued, medicine was "at once the model of the new philosophy and the proof of its efficacy." The philosophes themselves, in their more grandiose moments, even cast themselves "as physicians to a sick civilization."[18] For them, medicine substantiated an intellectual "recovery of nerve" and reflected how educated people increasingly valued free inquiry, philosophical skepticism, and "a growing willingness to take risks."[19]

These optimistic assessments clashed with traditional opinions. Significantly, enlightened intellectuals embraced medical science, less for its present status, than for its potential for humanity. To embrace medicine entailed a leap of faith. And this leap of faith dated back to the Scientific Revolution itself, whose leading lights, ranging from Francis Bacon to René Descartes, first imagined a new role for medical science.[20], One hundred years later, enlightened thinkers such as Condorcet and L.-S. Mercier shared the same hopes, imagining a society in which medicine had eradicated sickness and pain. In the 1750s, the Montpellier physician J.-J. Ménuret de Chambaud, writing in the *Encyclopédie*, hoped that medical science one day might "cure" death itself.[21]

Other enlightened figures, less Panglossian in their assessment, also admired medicine. One figure deserves particular emphasis: Denis Diderot. When editing the *Encylopédie*, Diderot commissioned over twenty doctors to write technical articles,

including Théophile de Bordeu and Théodore Tronchin. Not only did Diderot pen independent essays on medical subjects—including one on anatomy—but he also drafted, later in life, a study on physiology, in which he skewered C.-A. Helvétius, the philosopher who had asserted that "man was solely the product of his education."[22] Elsewhere, Diderot insisted that nothing interested him more than talking with doctors.[23] In his unpublished book, *Le Rêve de d'Alembert*, he even made Bordeu his spokesperson for his materialist philosophy. In this text, his interlocutor, the Madame de l'Espinasse (also based on a real person), declared that "there is no difference between a doctor who is awake and a philosopher who is dreaming."[24]

Whereas Diderot was an amateur enthusiast, several prominent philosophers boasted medical backgrounds. John Locke, whose sensationalist psychology arguably constituted the dominant epistemology of the Enlightenment, was himself a physician, one who learned his trade from the pioneer in neurology, Thomas Willis; elsewhere, Locke praised his medical colleague, Thomas Sydenham, as one of the greatest minds of the enlightened age. Both Thomas Mandeville and François Quesnay, whom historians now commemorate as early aficionados for the market economy, were schooled, respectively, in medicine and surgery, as was the Chevalier de Jaucourt, who wrote for the *Encyclopédie* and produced almost a quarter of its content (while maintaining his private practice).[25] Another exemplar was Carl Linnaeus, whose botanical work and binomial classification system epitomizes, in many ways, the enlightened spirit of the 1700s.[26]

These facts explain why some doctors asserted a greater disciplinary pride, the naysayers notwithstanding. Antoine Louis, a prominent surgeon who pioneered tracheotomies and who provided the forensic evidence to rehabilitate the wrongly convicted Jean Calas, argued that medicine was "the most excellent" of the arts and sciences, one that could unveil the "mysteries of nature" (he also, later in life, designed the guillotine).[27] The most notorious philosophe of them all, Julien Offray de La Mettrie, insisted that doctors possessed special insights about the human condition that traditional theologians and philosophers lacked. In such questions, bragged La Mettrie, "experience and observation should alone guide us. They find themselves without number in the successes of doctors who were philosophers, but not among those philosophers who weren't doctors.… They alone have unveiled the hidden sources under the surface, which reveal so many marvels to our eyes."[28]

While the medical revolution extended this authority and prestige, not all observers agreed that medicine formed a rigorous empirical science, one worthy of the same respect accorded to Newton's physics or Lavoisier's chemistry. It had shown progress, to be sure, but uncertainties remained. Doctors conceded this point. Nor did lay observers consistently view doctors as rooted in the scientific spirit and possessing specialized skill sets. Some doctors and surgeons boasted virtuoso technique and impressive results (as with cataract surgery or first-aid methods); however, these skills were neither uniform nor universal. In the end, medical understanding often seemed vague and uncertain, and its procedures risky, if indistinguishable from those practiced by irregular and itinerate healers. In the words of Jacques Léonard: "The authority of doctors expanded, their prestige increased *before* their efficacy was confirmed. Their power was relied upon *before* their knowledge had been proved."[29]

So, what drew the literate and leisured to medicine? Doubtless social class constituted a factor, especially in the towns and cities, where doctors rubbed shoulders with aristocratic patrons and their bourgeois clients (though practitioners varied in income level).[30] However, other things were going on. Doctors accrued cultural authority, not solely on prestige, but also because they belonged to the larger republic of letters.[31] Distinguishing themselves as writers, they engaged the big questions of the day, above all those regarding human nature and society—though doctors sometimes established this status because of other intellectual pursuits, as Laurence Brockliss's study of one provincial doctor has shown.[32]

Doctors assumed several personas: as *savants*, figures who exercised mastery over technical and erudite subject matter, from antiquarian studies to natural philosophy;[33] as *hommes des lettres*, literary types who populated the fashionable salons, academies, and cafés, and who earned their reputations (and sometimes their daily bread) by the power of their pens; and as *philosophes*, those critical and engaged intellectuals such as Diderot or a Voltaire who wanted to overturn prejudices and superstitions and whose credo was *écrasez l'infâme*.[34] "It is part of the doctor's character to be a philosopher," wrote François Doublet in the *Encyclopédie méthodique*; "that is, the doctor, who has an understanding [*esprit*] of his position, must be a true philosopher." "The doctor," he continued, "in occupying himself endlessly by studying and understanding men, has no other goal than to enlighten them, to help them, to console them, and that all the activities of his life are geared towards this praiseworthy objective."[35]

Into this world stepped a new figure: the *médecin-philosophe*, the "doctor-philosopher." Note that the word "philosopher" was attached to "doctor," not as an adjective, but as a substantive, as if to suggest that the doctor and the philosopher, ordinarily two distinct specimens, were fused in a new intellectual persona.[36] Doctors such as Bordeu and La Mettrie first used the term, and learned observers then applied it to prominent crusaders such as Tronchin, who often represented an ideal for them. Accordingly, the doctor-philosopher possessed a unique mindset. He engaged broader philosophical or social issues while avoiding crusty theological or metaphysical orthodoxies, focusing on real-world experiences and what he could learn from them. He was, in short, a character who stepped back and questioned medical knowledge, believing in his duty to apply medicine to human needs. Echoing Doublet, Dr. Jean-Alexis Belliol said that the doctor-philosopher could "pass the fruits of science through the sieve of reflection, illuminated by experience."[37] Instead of ensconcing themselves in ivory towers, doctor-philosophers combined theory and practice and could thus improve society.[38]

In response, the doctor-philosopher focused on one field: the so-called "science of man." The science of man constituted the heart and soul of enlightened philosophy, the corollary of Newtonian physics for human affairs.[39] Foremost, it studied human nature. Observers examined the essential qualities and attributes, whether physical or moral or internal and external, that shaped the self; what motivated individuals in their human relations; and what people needed, materially and morally, to flourish as individuals. Once philosophers established this nature, they could best determine those forms of government, laws, and economic policies that best suited the human condition.[40] The science of man thus became an instrument by which reformers could improve humanity,

if not perfect it outright.

Prominent doctors connected the science of man to medical reform itself,[41] calling it "the most sublime and most necessary" of all the sciences.[42] For these physicians, medical knowledge must assume a bioanthropological element to it, something that Elizabeth A. Williams has called "anthropological" or "physiological medicine." "Anthropological medicine" involved, above all, studying vital principles and the biological factors that shaped mind and body, including those qualities called "temperament," "predisposition," "the passions," and so on.[43] To understand these relations, physicians focused upon the primary agents of sensation—the brain and nervous system—and how feeling and cognition operated within the organism.

In France, doctors often framed these qualities under the rubric of "sensibility," that is, how the organism could feel and respond to sensation. Here, doctors studied how individuals responded to both internal and external stimuli, whether in the "natural" environment or in the social conditions that humans had created for themselves.[44] These themes were first broached, in the early eighteenth century, by physicians such as Friedrich Hoffmann, Hermann Boerhaave, and J.-B. Haller, and were then expanded by influential physicians of the Montpellier medical school, notably François Boissier de Sauvages, Théophile de Bordeu, Louis de Lacaze, Pierre Roussel, and P.-J. Barthez, as well as the Rouen physician C.-N. Le Cat and Vicq d'Azyr himself. By the 1790s, doctors had integrated this anthropological medicine into the new Paris schools and inspired luminaries such as Pierre Cabanis, Xavier Bichat, Charles-Louis Dumas, and B.-A. Richerand.[45]

Though these *médecins-philosophes* used medical anthropology to glean physiological or therapeutic insights, several of them raised broader questions about individuals, society, and nature. For them, the medical science of man could, like other branches of enlightened philosophy, improve or perfect society, thereby becoming, as Roy Porter put it, an "action philosophy."[46] Physicians joined enlightened statesmen and administrators by advocating for "medical police" measures or humanitarian campaigns to preserve life and well-being—a mounting concern was child health and mortality—through law or public awareness campaigns. The list was extensive. Hospital and charity reform. Inoculation and vaccination. Drainage and ventilation. Cemetery removal and new burial regulations. First-aid societies for the "recovery of the apparently dead."[47] The *médecins-philosophes*, then, hoped to extend medical expertise into the most intimate realms of daily life and thus improve the lives and health of ordinary people.

Significantly, the *médecin-philosophe* was also a writer. Not just a specialist, he aspired to reach a larger audience and shape public opinion. Like the enlightened philosophers, the *médecins-philosophes* often wrote in a nonspecialist style, one that doctors themselves described as *savant*. It was learned but accessible, a form that any literate or refined person might understand and enjoy.[48] This style took multiple forms. For instance, Bordeu used a sly and saucy tone in several of his physiological works, elaborating his endocrinological theories in a language and style that appealed to lay readers. La Mettrie, in his *L'Homme machine* and *L'homme plante*, cultivated a similar approach. An analogous technique appears with naturalist Pierre-Louis Maupertuis's writings on generation.[49] When discussing nervous disease, doctors and lay writers promoted a variety of medical

genres, including epistolary frameworks, dialogues, imaginative narratives, autobiography, and even polemics.[50] These strategies, as will be seen, characterized the medical writings in the postrevolutionary years.[51]

It was this quality—style wedded to content and purpose—that drew readers to medicine. More than technical advance impressed them. Doctors wrote about pressing issues about human nature and society and did so in a lively conversational and general style. This open-ended and accessible quality allowed educated people to engage in medical texts and ideas and appropriate them in unexpected ways. In these instances, medicine intersected with the new popular science that appeared in the 1770s and 1780s. A new specimen presented itself to the *médecin-philosophe*: the *prophète-philosophe*.

Another long-term phenomenon influenced the medical undercurrents of the postrevolutionary years: the rage for popular science. In the last decades of the Old Regime, science dazzled spectators and shaped broader mentalities. Public interest transcended scientific aficionados. It became a genuine passion, something that touched the lives and imaginations of the educated and leisured classes (much like medicine itself). Consequently, Robert Darnton has dubbed the 1770s and 1780s as a "golden age" of popular science, an age in which natural philosophy "opened limitless vistas of human progress" and excited "awe" and "almost religious enthusiasm."[52] For Vincenzo Ferrone, science became a "collective intellectual undertaking," one that was "immediate, direct, and tangible" in scope and depth.[53]

This phenomenon spread throughout Europe. In France, however, it affected politics and medical science in distinct ways. First, there was the expanding market for scientific books addressed to general readers, a trend that mirrored a similar growth of books on health and hygiene.[54] Editors fed the public hunger for science by serving up an array of books explaining the breakthroughs of the scientific revolution, above all the mathematical and physical sciences of Isaac Newton.[55] Pioneered by figures such as Voltaire, Francesco Algarotti, Émile de Châtelet, and Pierre-Louis Maupertuis, this trend culminated in Diderot and d'Alembert's *Encyclopédie*, which in many ways offered a love letter to modern science. D'Alembert's "Discours préliminaire," in particular, insisted that scientific advance itself drove human progress and improvement. This belief was so ingrained that, some forty years later, during the Reign of Terror, the philosopher Condorcet, hunted and marked for death, still hoped in scientific and social progress.

Aficionados did more than read scientific books. They also experienced science as a public spectacle. During this time, civic crusaders and entrepreneurs established a network of museums and lyceums to capitalize upon the public craving for scientific and technological novelty. Funded by prominent figures such as Condorcet, Antoine Court de Gébelin, and Claude-Mammès Pahin de Champlain de La Blancherie, these venues offered the learned and leisured a wide range of public talks and demonstrations, all which well-read journals reported upon, such as the *Journal de Paris, Les Nouvelles de la République des lettres*, and the *Mémoirs secrets pour servir à l'histoire de la république des lettres*.[56] One notable figure in this regard was J.-F. Pilâtre de Rozier, an entrepreneur and impresario, who established the Musée des Sciences on the rue Saint-Avoie in Paris.[57]

In these settings, science became entertainment. Public lectures often boasted

instruments and gadgets—including Leyden jars, lightning rods, magnets, orreries, air pumps, microscopes, and telescopes—which promoters then marketed to viewers.[58] At times, lecturers performed astounding feats, as with gaseous substances such as hydrogen, going so far as to "breathe fire" or stunning onlookers with camera obscuras or planetariums (such as the one built by Graham and Desaguliers). Electricity, in particular, thrilled audiences, as seen with performers such as abbé Pierre Bertholon, Jean-Antoine Nollet, P.-J.-G. Mauduyt, and Benjamin Franklin, the last whom contemporaries hailed as a new Prometheus.[59] The debates even attracted a young attorney from Artois named Maximilien Robespierre.[60] Elsewhere, enthusiasts flocked to public dissections and demonstrations on comparative anatomy or built naturalist cabinets or collected fossils together.[61]

One fad encapsulates the rage for popular science: ballooning. Starting with the dramatic Montgolfier flight at Versailles in 1783, crowds of ordinary French men and women, sometimes numbering in the tens of thousands, gathered to watch balloon launches. They followed the self-dubbed *aéronautes* with the same passion that Americans followed the space race two centuries later.[62] Observers claimed that ballooning betokened a new age of scientific progress, one in which enlightened humanity had achieved the old dreams of Icarus. It also reflected the intellectual vitality and competitiveness of the nation-state, as well. And so, in 1785, when Pilâtre de Rozier died trying to cross the English channel—his hydrogen balloon burst, and he fell hundreds of feet—the French public mourned his death, not just as a blow to science, but as a loss to the nation itself.[63]

At the same time, these public spectacles could undermine scientific objectivity and authority. Traditionally, as Simon Schaffer has shown, public science demonstrated that nature was orderly and providential. In principle, it compelled spectators to accept only those forms of authority sanctioned by the political and religious establishment.[64] This agenda informed the Boyle lectures in England and similar events in scientific academies and public venues all across Europe, including France. In such moments, scientific investigators purported to command nature in ways that substantiated how the monarch ruled over the body politic or how a providential God ordered his cosmos. Through such means, intellectual authorities sought to demystify and delegitimize the charismatic claims advocated by religious enthusiasts and political radicals.[65]

However, during the eighteenth century, popular science undermined how official elites saw nature and the social order. Eschewing regular physical laws, unorthodox naturalists invoked active or occult forces—which they often derived from pantheistic or animist traditions—to challenge the belief in a divinely sanctioned order. In so doing, popular science acquired a more subversive, if not radical, quality to it. Popularizers questioned scientific objectivity and rationalism, insisting that beholders should respond to the marvels of nature with wonder and enthusiasm—the exact things that the older natural philosophers had wanted to oust from the intellectual arena.

In the 1770s, this attitude coalesced around a group of naturalists, doctors, and fellow travelers called the *prophètes-philosophes*, an adage taken from a book written by J.-L. Carra, who was an unorthodox naturalist and future Girondin.[66] Often, this scientific radicalism comprised movements such as animal magnetism, physiognomy, and

rhabdomancy (the first two I discuss in subsequent chapters), all which circulated alongside other fads such as ballooning and electrical shows.

The *prophètes-philosophes* constituted an eclectic group. They included the martyred Pilâtre de Rozier, whom we've just encountered; Le Roy, who wrote on issues such as animal magnetism, natural history, and ballooning; and Nicolas Bergasse, who was a philosopher and jurist and who became one of Franz Anton Mesmer's more ardent supporters in the 1780s. Several of these characters, notably Brissot de Warville, Jean-Paul Marat, and Carra himself, became political leaders during the French Revolution. In other instances, as with L.-C. de Saint-Martin and J.-B. Willermotz, this prophetic science merged with spiritualism and produced movements such as the Martinism, Rosicrucianism, Theosophism, and Swedenbourgianism.[67] Into this cauldron stepped outright swindlers such as Johann Joseph Gaßler, Johann Schrepfer, and, most famously, Giuseppe Balsamo, the so-called Count Alessandro Cagliostro.[68]

This prophetic trend corresponded with what Charles Coulston Gillispie has called the "encyclopedist" or Jacobin ideology of science. In the mid-1700s, this ideology responded to a perceived crisis in post-Newtonian science. At this time, J.-L. Lagrange, P.-S. Laplace, and A.-L. Lavoisier elaborated physical laws and properties in more complicated mathematical and empirical terms (on another level, critics reviled Lavoisier for being a tax farmer). Yet detractors rejected these deterministic and materialist models. Instead, they returned to pantheistic and animistic doctrines, a Renaissance "neo-naturalism" derived from Paracelsus and J.-B. van Helmont.[69] The *prophètes-philosophes* thus celebrated "the divinatory tradition" in science. This included "the study of signs, effects, and particulars, identifying normative categories that were highly intuitive and founded on shared sensibility and the morphological analysis of nature."[70] The encyclopedist approach provided a more "humanistic" and "comforting" vision, one in which observers personified nature and gave its laws moral meaning. Such ideas emerged in the writings of Diderot and Rousseau and were elaborated by Jean-Baptiste-René Robinet, Antoine Court de Gébelin, and J.-H. Bernardin de Saint-Pierre. These writers offered a dynamic vision of life and creative evolution, one in which nature provided a moral good.[71]

This approach had three consequences. First, the *prophètes-philosophes* espoused a form of scientific populism. For them, science should remain neither abstract nor isolated from society, something they thought had happened with the academic science of the Old Regime. Instead, they said, science should remain accessible and open to all people, not just aristocratic or wealthy elites. It was a pursuit perhaps best attained by skilled artisans and craftsmen. Prophetic science thus espoused a grass-roots and utilitarian agenda, in that every person should profit from it and improve the world. The Grub Street hacks picked up this theme, and it circulated in the secret and mystical societies that mushroomed in cities such as Paris, Lyon, and Strasbourg.[72]

Further, the *prophètes-philosophes* assumed a rancorous and sometimes aggressive posture in public. In resentful tones, they charged that official science had become entombed in monarchical-aristocratic establishments. These institutions, it was alleged, constituted bastions of privileged elites, bastions in which snobbish intellectuals hobnobbed with one another and conspired to block commoners from recognition and

reward.[73] No figure better embodies this spirit than the failed physician and scientist Jean-Paul Marat, who, during the revolutionary years, used his public clout to pursue, among other things, old grievances.[74]

Lastly, the *prophètes-philosophes* grounded their populism in natural knowledge. For them, nature promised that people could master and improve the world around them. This vision, in no small part, corresponded with a deepening mistrust of Old Regime beliefs and institutions. They told adherents that they could control their destinies; people lived in a natural world where justice and virtue were not just possible, but cosmically sanctioned. Prophetic science promised individuals could better understand the world around them and then change it. Nature, for them, legitimated a radical egalitarianism, a force that swept away injustice and intolerance. Like the science of man, prophetic science provided a philosophy of action. Carra wrote:

> Study, then, the System of Reason and the code of natural laws. You will sense the sacred necessity of civil equality for everyone, of relative liberty, of reasonable property, and individual security for all equally; you will tremble at the infinite distance that the jealousy of rank and the absurdity of power has put between you and fairness, between you and happiness; you will weep over the atrocious evils, over the cruel injustices which you've inflicted upon your unfortunate slaves; and, trampling underfoot this scepter and this crown, which force and stupidity have given to you, and which you cannot maintain without the risk of becoming the cruelest tyrant, you will go—I do not doubt it—to overturn the temple with which stupid opinion had clothed you, and inscribe upon immortal bronze the real laws of nature and its real system.[75]

These prophetic aspirations intensified during the French Revolution. During this time, revolutionaries abolished the old universities and academies, from the Académie Royale des Sciences to the Société Royale de Médecine, and in their place inaugurated a grand laissez-faire experiment, one intended to promote a more practical scientific spirit —here focused upon engineering and technology. The same fate befell the old medical schools and guilds. For the Jacobins, as Gillispie has argued, science for its own sake, as an autonomous body of knowledge, could not exist. "Theirs would be a science which, as to its technological aspect, would be a docile servant, and as to its conceptual, a simple extension of consciousness to nature, the seat of virtue, attainable to any instructed citizen through goodwill and moral insight."[76]

Moreover, these radical ideas incited violence, not just toward official institutions but actual persons, as well. J.-S. Bailly and Lavoisier both died on the guillotine; Condorcet was hunted down and died, perhaps by his own hand; and Vicq d'Azyr, it is said, died of a broken heart. Not that the *prophètes-philosophes* benefited. Marat, of course, was ignominiously assassinated; Brissot and Carra were guillotined together; Bergasse narrowly escaped the same fate; and François Lanthenas died in penury.

By the 1790s, therefore, a new scientific awareness had emerged among the educated classes, an awareness that shaped medical writing and practice in the postrevolutionary decades. Prophetic science became a cultural force, one that responded to the social and

ideological conflicts of prerevolutionary France, carrying new values and practices in its wake. Within this setting, a panoply of subgroup attitudes and countercultural behaviors emerged, all of which framed themselves by opposing "legitimate" or "establishment" forms of scientific practice. After 1789, medical practitioners continued this subversive and radical tradition but adopted it to postrevolutionary realities. Medicine here dovetailed with the millenarian and utopian yearnings unleashed by the revolution, whereby men and women dreamed of making a new humanity. These yearnings had a name: "physical and moral regeneration."

One final factor influenced postrevolutionary medical undercurrents: the dream of physical and moral regeneration. This dream had surfaced in the Old Regime but then fully emerged on the political scene during the French Revolution proper. Regeneration constituted a critical element of the revolution's political culture, and its power lured many of the writers encountered in this book. In this discourse, legislators and intellectuals dreamed of making a new man and society and then debated what this regenerated figure would look like and how to go about making him or her.[77] In this manner, they imagined new bodies for themselves—more healthy and aesthetically pleasing—and sought new realms of bodily experience and public display. The revolution, they thought, could change the human self from the inside out.

To make flesh of the ideal, revolutionaries talked in grand terms. Some crusaders, such as the revolutionary legislator (and soon-to-be martyr) L.-M. Le Peletier de Saint-Fargeau, wanted to create public schools based on ancient Spartan customs and thereby mold republican citizens and warriors. Other revolutionaries, such as the neoclassical artist J.-L. David, galvanized audiences with public art and festivals, or, as with the visionary architect E.-L. Boullé, hoped to awe them with imposing monuments, edifices that would eclipse those of ancient Greece and Rome. Sometimes these visions extolled political violence as a means of sanctifying the body politic, as with David's immense *Le Triomphe du peuple français* (1793–1794).[78] Medical personnel joined this crusade to regenerate society in its moral and physical dimensions, believing that biomedical science could create virtuous and healthy citizens.

As with prophetic science, many of these ideas originated in the Old Regime. It is a cliché to portray the eighteenth century as a time of smug faith in enlightened progress. Quite the contrary, many contemporaries believed that decadence and decline menaced European civilization, especially that of France. In contrast to present-day understanding, which identifies the eighteenth century as a time of demographic growth, critics believed that the French population was *declining*.[79] France's political and intellectual elites experienced a deep-seated panic about the nation's underlying health and morality and then set out on a public crusade to cure these underlying conditions. These ideas had emerged following the political and military disasters of the 1740s and 1750s (above all the War of Austrian Succession and the Seven Years War). They seemed, much like the ideas of the *prophètes-philosophes* a few decades later, to crystallize great frustrations toward France's ruling elites.[80]

Though these anxieties touched other intellectual traditions, such as natural history and economics,[81] they reverberated strongly in medical circles. Doctors and surgeons felt

well-posed to battle against social pathologies. In response, civic-minded crusaders proposed wide-ranging programs of physical and moral hygiene to eradicate moral vice and cure degeneracy and depopulation.[82] Often these medical crusaders followed Jean-Jacques Rousseau, who had taught that civilization had alienated humanity's primeval relation with nature, thereby making people sick in their minds and bodies.[83]

Imbued with this spirit, doctors responded to what one crusader called "le cri de la nature" and cast themselves as agents of regeneration.[84] In the 1750s, doctors such as Antoine Le Camus, C.-A. Vandermonde, and N. Brouzet fired the first salvos, and then the battle was engaged by hygienists such as Samuel-Auguste Tissot and Jacques Ballexserd, both of whom stylized themselves, in good Rousseauvian fashion, as "friends" to the people's health.[85] In the 1770s, this health crusade found institutional support within the Société Royale de Médecine. Charged with studying public health, the Société Royale also focused upon degeneration and depopulation. Members discussed a range of anxieties: the physical education of children, the prevalence of nervous diseases such as hypochondria and hysteria, and the transmission of hereditary diseases.[86] Medical correspondence, above all that of Samuel-Auguste Tissot, suggests that literate people had internalized these concerns, especially with nervous disorder and self-pollution.[87]

In this widening sphere of medical activism, doctors discovered degeneracy everywhere. Fashionable elites (*gens du monde*), men of letters (*gens des lettres*), court notables or grandees (*les grands*), salon women, debased libertines, demimonde courtesans, vaporous men and women, hysterics, hypochondriacs, nymphomaniacs, masturbating teenagers, swaddled babies, valetudinarians, religious men and women: each group found hygienic specialists who delved into their lifestyle to expose the origins of sickness and decline. This gaze penetrated France's colonial holdings, as well, where doctors lambasted slave morbidity and mortality and sought to meliorate the plantation system.[88]

For the most part, medical critics accepted that personal lifestyle—the free-living and free-thinking associated with fashionable elites and the new commercial society—had destroyed traditional moral restraints. Appealing to patriotic virtue, medical crusaders condemned polite society and countered with an ascetic lifestyle, one that promoted family values.[89] However, medical practitioners did more than react to moral fears; doctors such as C.-A. Vandermonde took this moment to revise traditional ideas about health and hygiene and imagine human nature differently.[90]

The French Revolution intensified this crusading spirit, offering individuals the opportunity to alter health and hygiene. According to Nina Rattner Gelbar, some observers experienced the revolution as a medical event unto itself, one that changed how individuals understood their bodies and minds. Profound moral and political consequences followed.[91]

However, doctors and laypeople disagreed on what these developments meant. For some, the revolution could cure all the physical and moral ills of the Old Regime, whether individual or collective. For others, the revolution resembled a pathological force, one that sickened people and destroyed everything that maintained personal well-being. Another group of doctors steered between radicalism and reaction, hoping to consolidate medical and political gains in a more moderate republican polity. Ideology

shaped all these opinions.[92]

On the radical side, the revolution offered new medical hope for society. It had allowed men and women to change their public and private lives and thus inaugurate a more healthy and harmonious world for everyone. Citizens were baptized in the new political font and were born again in mind and body. For some revolutionaries, this regeneration constituted a *deux ex machina*, a sudden release of primeval virtue and vitality. It could generate, almost spontaneously, new faculties or repair lost or degraded ones. Building upon enlightened faith, this vision presaged a reborn humanity, a new Adam himself.[93]

One physician personifies this radical belief: the doctor and legislator François-Xavier Lanthenas. Lanthenas studied medicine in Paris and took his degree from the university in Rheims, where he submitted a thesis on the characteristically Rousseauvian theme of how education could prevent disease. After the revolution broke out, Lanthenas joined the Cercle Social, a radical group that promoted women's rights, abolitionism, and property redistribution. Once elected to the National Assembly, he hewed to the Roland faction. There, Lanthenas fraternized with Thomas Paine and translated *Common Sense* and *Age of Reason* into French (Paine also interested himself in public assistance and health care). He voted for Louis XVI's execution but, like other moderates, moved to suspend the sentence and imprison him for life.[94] As a consequence, he ran afoul of the radical Montagnards. Only Jean-Paul Marat's appeal saved him from dying alongside the other Girondins, including Carra, on the guillotine. With Lanthenas, the *médecin-philosophe* merged with the *prophète-philosophe*.

In his writings on medicine and hygiene, Lanthenas insisted that political life shaped the health of the nation itself. According to him, despotism had disabled men and women in their bodies and spirits, ruining their health and happiness by blinding them to nature's healing principles. Under the Old Regime, he said, "the people" had alienated their health. Instead, it was expropriated by the wealthy and privileged classes, all who denied ordinary men and women the means of preserving themselves from sickness and death. In their place, the elites proffered those factories of oppression and death: the hospital. However, by sweeping away old laws and institutions, the revolution allowed the people to reclaim their primordial rights so they might become healthy and happy again. The battle against disease and poverty began with the battle against corrupt government.[95]

Lanthenas represented one radical vision of regeneration. For other sympathetic observers, regeneration might come, not from spontaneous outpouring, but rather from carefully crafted public policies. Revolutionaries, they said, could create laws and institutions that nurtured mind and body and could thus mold the French nation into something better and more powerful. Regeneration constituted not a spontaneous event but instead a controlled process, one implemented by enlightened legislators and scientists working together.

In the early revolution, these ideas inspired legislators to make medical care more accessible to society's most vulnerable members. For instance, deputies such as Dr. J.-I. Guillotin and the humanitarian crusader F.-A. La Rouchefoucauld de Liancourt proposed to reorganize entirely charitable assistance and hospital care. Some enlightened reformers even said health was a universal right for all citizens (much as Lanthenas

himself had suggested). Though civil war and violence overtook these dreams, reform-minded doctors and legislators returned to these ideals after the Reign of Terror, salvaging some of them when making the new hospital system.[96]

The mathematician and legislator Condorcet best expressed this reformist spirit. In his *Esquisse d'un tableau historique des progrès de l'esprit humain*, written during the terror and published posthumously, he envisioned future legislators using medicine and social science to improve the human race. Outlining a broad program that built upon Bacon and Descartes, he discussed how legislators could meliorate sanitary conditions and alter humanity's relationship with nature itself. Medical science could eradicate epidemics and chronic disease and thereby make people healthier and happier. Legislators could even breed better families, improving hereditary stock in an epic sweep of evolutionary progress. Ultimately, for him, life expectancy and material well-being measured human progress.[97]

Not all practitioners agreed with Lanthenas and Condorcet. For more conservative physicians, medical science instead documented the negative consequences of the French Revolution. Tempered by terror and bloodshed, these writers insisted that revolutionary events had inflicted horrible side effects upon people. These scars appeared not just on the battlegrounds and killing fields, but in the realm of private life and mental well-being. In 1795, for example, the young physician J.-L. Alibert—whose later works I discuss in chapter 8—wrote an article in which he disparaged the French Revolution. He claimed that political events could damage psycho-physiological states, causing cardiovascular disease or inflaming the so-called passions of the mind.[98] The revolution had eradicated some diseases—including hysteria and hypochondria—but it had unleashed new pathologies that had unbalanced mind and body.

Alibert was not alone. In 1792, for example, the clinician Pierre-Joseph Desault had observed that political passions had caused a higher incidence of aneurysms.[99] Philippe Pinel, in his book on madness and "moral" medicine, had told astounding case studies of how political violence had traumatized ordinary citizens.[100] Given such observers, moderate or conservative-minded doctors concluded that people ought to learn self-restraint before they could assume all the benefits—and handle the side effects—that individual liberty occasioned. Rather than sweeping away the old order, as Lanthenas had wanted, these observers insisted that the new physician-legislators must restrain popular enthusiasm and violence through law and public instruction, encouraging people to submit to legitimate authority. Freedom, for them, could not exist without duty.

A good example appears in the writings of Marc-Antoine Petit. Petit was a chief surgeon at the Hotel-Dieu in Lyon and who served as a correspondent for the new Institut National in Paris. In 1796, he delivered a formal lecture to commemorate the opening of his new courses on anatomy and surgery at the hospital. Speaking to a crowd of young medical students, he assessed how the revolution had affected the nation's health and he later expanded his reflections in his book titled *Essai sur la médecine du coeur*, which he published in 1806.[101] Petit modeled his discourse on that of the American physician and revolutionary Benjamin Rush, who had written on how the American Revolution had affected public health in his *Medical Inquiries and Observations* (1789). Unsurprisingly, Rush had assessed the American Revolution positively. For him, it had

unleashed democratic energies that had drawn people closer to nature and rendered them more industrious and fertile.[102] Following Rush, Petit observed that the French Revolution had released similar vital impulses, some of them healthful. However, doctors must better understand the course that this "regeneration" had taken and the form it would ultimately assume.

According to Petit, doctors had a civic duty to assess such questions because revolutions were analogous in individuals and the body politic. Both processes could restore harmony and well-being: for citizens through medical regimen and for societies through new laws and institutions. The therapeutic process was not always pretty, sometimes involving short-term pain and bloodletting. However, neither the doctor nor the legislator should forget the ultimate goal: to cure the patient.

For Petit, the revolution was Janus-like. On the one hand, it had apparent glories: the republic, military victory, "regeneration," and a more "durable" constitution. On the other hand, however, it had bloody and shameful memories, above all those caused by war and terror. In some instances, the revolution had revivified morals and manners, but elsewhere it debased or degraded others. In medical terms, doctors must ask how political events had altered these elements of health and well-being.

On the positive side, Petit underscored how the revolution had eradicated the nervous diseases associated with the Old Regime. Revolutionary politics had transformed temperament on a broad scale. Legislators had improved diet, abstinence, exercise, milieu, and working conditions (Petit alluded to the Le Chapelier laws, which had suppressed the old guilds, medicine included). In these cases, doctors could say that the revolution had regenerated the body and mind.

On the negative side, Petit stressed the traumas of the Reign of Terror. He scarcely needed to remind his audience of this fact, given that Lyon had suffered some of the worst carnage of the revolution. As Petit argued, these bloody events had permeated the collective psyche. Political circumstances had exacerbated individual sensibility and had engendered traumatic new disorders, especially in the realm of the mind. For him, the revolution had altered the human frame in all its physical and psychological qualities, from ghastly wounds on blood-soaked battlefields to nervous collapse in one's private darkness. The horror was pervasive.

Politics constituted as much a disease as a cure. "In examining the effects of the French Revolution on the animal economy," said Petit, no part of the body politic "had been spared." And here Petit identified a central issue, one to which subsequent medical writers kept returning: the revolution as a psychophysiological trauma, both individual and collective, that doctors could diagnose and mediate.[103]

These themes were echoed by Petit's colleague at the Lyon hospital, Louis-Vincent Cartier. Like Petit, Cartier expressed ambivalence about the revolution and health in his public lectures. Cartier drew upon the anthropological medicine associated with the *médecins-philosophes* and attributed all vice and virtue to the operations of physical sensibility. Going further than Petit, Cartier framed the relationship between individual health and political revolution as a problem of sensibility. For him, feelings and impulses threatened to overwhelm the individual's mind and body and, on the collective level, destroy the health and harmony of the body politic.

Historical forces, said Cartier, molded sensibility. France's crisis had started centuries before, when Christopher Columbus invaded the New World and incited new forms of greed, ambition, and bloodlust. The consumer goods originating from the Americas—sugar, tobacco, coffee, cocoa, and cotton—transformed taste and style and debased morality. Expanding upon the Rousseauvian theme, Cartier charged that consumerism and luxury had incited a grave health crisis. One saw it with the epidemic of nervous disorders and moral degeneracy, all which sapped the personal health and civic pride. These health problems had rotted the body politic from inside out and caused society to collapse in 1789. Passions and impulses had torn the social body asunder and sickened the people in their minds and deeds.

Like Alibert and Petit, Cartier believed that the revolution had forced legislators and medical personnel to confront the great enigma that was the human heart and how it might best be ruled. For him, the government must establish proper laws and conduct, whether instilled through public instruction or personal regimen, to govern human sensibility and reconcile personal freedom and civic duties. Otherwise, excessive sensibility would overwhelm citizens and incite further anarchy and violence.[104]

As these comments indicate, war and terror had transformed utopian aspirations. But these visions did not fully die. Contemporaries still dreamed of regenerating the French nation, and these dreams infused medical discourse for several decades to come. In the postrevolutionary years, more moderate figures hoped that public education and family law might contain radicalism within the family unit by giving fathers more authority over their wives and children and by inculcating respect toward political institutions. These ideas were discussed within broader intellectual and political circles, including the Idéologue philosophers, the neo-Kantian moralists, sentimental pastoralists, and the technocratic-minded Brumairians, and informed the final adoption of the Civil Code in 1804.[105]

Iconic medical figures such as Cabanis and Bichat shaped these values. Though doctors still hoped to regenerate French society, they cautioned that progress had limits, above all with women or the popular classes.[106] P.-J. Barthez emphasized differences in human aptitude in his *Nouveaux élemens de la science de l'homme*, some of which he framed in racial or biological terms.[107] Other doctors looked to domestic hygiene to reinforce moral sentiments and inculcate self-discipline and civic duty, or they saw in physiological science a more natural way of apprehending the relation between individual and society.[108]

Following these ideas, moderate doctors argued that humankind possessed deep-seated instincts for self-preservation and mutual sociability. However, these impulses must be nurtured first in the family and later through public instruction, whether in the form of schools or festivals or other civic pageantry. Hygienic regimen could promote self-control and personal respect, two qualities that society needed to maintain public order and moral values. The stakes were high. As Cabanis declared, when addressing national legislators after Napoleon had overthrown the Directory, "it is time that the great nation has a government worthy of it; a government firm and wise, which can give you a prompt and solid peace, and allow you to enjoy true well-being."[109] Medicine promised to give legislators and intellectuals the tools to build new laws, institutions, and

mores around the essence of human nature. It was this belief that informed many of the writers and texts encountered in subsequent chapters.

By the mid-1790s, several overlapping factors inspired new forms of medical writing and readership. The new clinical medicine and hospitals fired public sentiments and inspired people to use medicine to chart the transformed landscape of postrevolutionary France. Even beyond these scientific innovations, other long-term cultural currents shaped medical writing and subcultures. Three elements stand out: the appearance of the *médecin-philosophe* and the new intellectual status accorded medical practitioners; the growth of science as spectacle and the new directions in radical or prophetic science; and lastly, the millenarian or utopian visions of regeneration that had emerged in the Old Regime and which erupted in the public arena during the French Revolution. These currents, which mixed together, influenced how contemporaries began to use medicine to understand the broader sociopolitical and cultural world around them. Our story begins in 1795, when the Marquis de Sade published his *La Philosophie dans le boudoir*.

CHAPTER 2

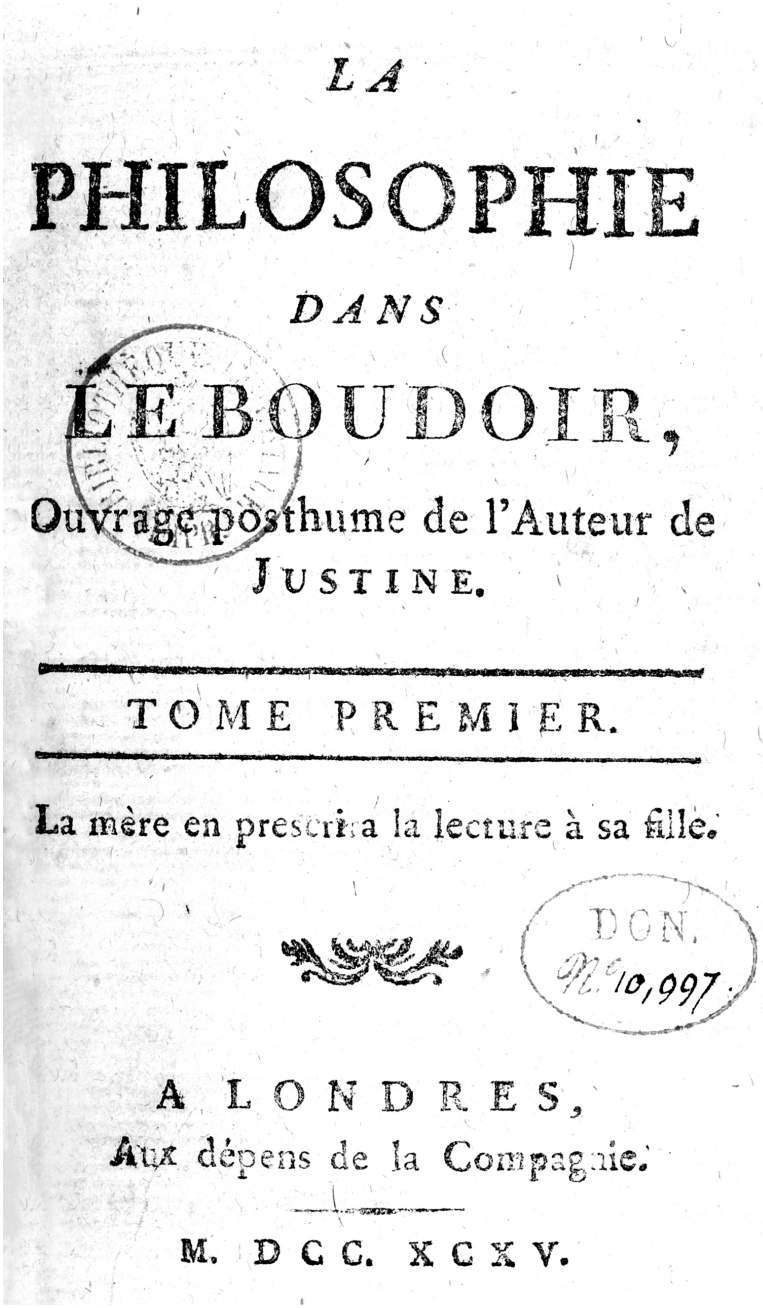
Medicine in the Boudoir

The Marquis de Sade and Medical Understanding after the Reign of Terror

In August 1795, the Marquis de Sade published his *La Philosophie dans le boudoir* (fig. 2.1). He was penniless and debt-ridden but lucky to be alive. The previous year, during the Great Terror, he had come under political suspicion because of his aristocratic pedigree and past associations. His newfound republican zeal and activism made little difference. Revolutionary authorities first imprisoned him in Saint-Lazare and then put him in the Picpus hospital. He arrived three days after the Hébertists were beheaded, and nine days before Georges Danton and his friends met the same fate. From his cell, Sade could see the guillotine do its gruesome work at the Plâce du Trône Renversé, watching as the hospital orderlies buried 1,800 victims in the garden.[1] Only Maximilien Robespierre's sudden execution in July 1794 saved him from the scaffold. In early autumn, a few months later, Sade was amnestied and released. Like many former prisoners, he joined the rippling misery that ensued after the Thermidorian republic abolished rationing and price-fixing. In Paris, that winter, thousands starved or froze to death. And it was in this dire setting that Sade picked up his pen and tried to resume that vocation to which he had aspired since first imprisoned in the Bastille. He wanted to become a writer—an *écrivain*, a real *homme des lettres*. So much the better if one could earn one's daily bread from it. It was at this time that his epistolary novel *Aline et Valcour*—a work that he modeled on the style of Samuel Richardson, Jean-Jacques

Rousseau, and Choderlos de Laclos—also appeared in Paris bookstores.

However, *La Philosophie dans le boudoir* was an entirely different specimen. Unlike *Aline et Valcour*, in which Sade dealt conventionally with moral themes, *La Philosophie dans le boudoir* belonged to his corpus of "clandestine" or pornographic works. He published the book anonymously, in two leather-bound volumes replete with erotic engravings, attributing it to the "posthumous author of *Justine*" (his first scandalous work). It was an extraordinary document, repulsive as it can be to readers.[2] Within the book, Sade expressed his moral, philosophical, and even political opinions with a clarity and conciseness rarely encountered in his other writings. More importantly, the text reveals Sade's critical engagement with medico-scientific ideas, one that bridged philosophical attachments and immediate sociopolitical concerns. *La Philosophie dans le boudoir* helped usher in a new world of medical writing and subcultures following the Reign of Terror, connecting medicine and culture in the postrevolutionary moment.


LA

PHILOSOPHIE

DANS

LE BOUDOIR,

Ouvrage posthume de l'Auteur de JUSTINE.

TOME PREMIER.

La mère en prescrira la lecture à sa fille.

DON.
N° 10,997.

A LONDRES,
Aux dépens de la Compagnie.

M. DCC. XCXV.

FIG. 2.1. Title page from Marquis de Sade, *La Philosophie dans le boudoir, ouvrage posthume de l'auteur de Justine* (London: aux dépens de la Compagnie, 1795). Bibliothèque Nationale de France. The epigraph satirizes the didactic aims of much sentimental fiction and reads, "A mother will prescribe reading it to her daughter."

Readers have long associated medicine with the Marquis de Sade. This connection should not surprise. A person who claimed such an intimate knowledge of the body, all its pains and pleasures, surely would have known medicine, an art and a science that also claimed mastery over the human body. Often, there are two images of Sade and medicine. The first is Sade as a medical victimizer. Medical science allowed Sade's libertines to control their bodies and minds and thus intensify pleasure and pain. Some of Sade's more diabolical protagonists know medical science. In *Justine ou les malheurs de la vertu* (1791), the surgeon Rodin vivisects his own daughter; in *L'Histoire de Juliette* (1799–1801), Dr. Bracciani helps bomb the hospitals of Rome; and in *Les 120 journées de Sodome* (1785), doctors and surgeons torture victims with their bleedings, surgeries, and breeding experiments.

Beyond these literary examples, there remains a second image of Sade: in this case, as a person who was himself a victim of medical power. In these portrayals, Sade writes madly away in the Charenton asylum while psychiatric specialists like the Abbé Simonet de Coulmier and Dr. A.-A. Royer-Collard torture him while curing his "libertine dementia." This image has yielded heady material. Peter Weiss and Doug Wright have used Sade's experiences in Charenton to stage a whole set of conflicts—whether between capitalism and populism, libertine aristocrat and ascetic bourgeois, or domineering physician and submissive patient.[3]

Remarkably, while the association between Sade and medicine is often evoked, it is rarely studied in its precise historical setting. No doubt, this lacuna stems from the understandable reticence to treat Sade as part of the literary canon—Roger Shattuck has called him "potential poison, polluting to our moral and intellectual environment"—let alone to situate him within the specialized world of science and medicine.[4]

This neglect is unfortunate. Though Sade's works are extreme and disturbing, they allow us to enter into the wide-ranging and zigzagging dialogue between medicine and culture after the French Revolution. Sade highlights the moment when medical authority began to permeate basic cultural understanding and became a lens through which people made sense of their mental, bodily, and social experiences. Indeed, we know that Sade followed medical and scientific debates closely. His vast library contained books by doctors like Julien Offray de La Mettrie, Louis de Lacaze, and Samuel-Auguste Tissot, and he consistently referenced or alluded to medical knowledge in his writings.[5]

Nonetheless, when literary critics and historians acknowledge Sade's debt to medical science, they often suggest that he reflected general ideas rather than engaged them directly.[6] David B. Morris and Anne C. Vila have faulted this traditional approach, showing how Sade "transvalued" medical science and severed it from the Enlightenment's humanitarian impulses.[7] However, this research has focused mainly on the psychosexual or literary desires that motivated Sade; the immediate ideological or cultural factors still need further elaboration.

This chapter argues that Sade used medicine for specific political and ideological reasons rooted in the revolutionary experience. While drawing upon several of Sade's pornographic works, the present analysis focuses primarily upon his *La Philosophie dans le boudoir*. In this text, Sade used medicine on three fronts—personal, philosophic, and political—in his campaign against established values. In this sense, Sadeian medicine

proved practical. He took medical ideas about individual health and hygiene and used them to defend libertinism, as a form of philosophic freethinking and sexual free-living, in a project that bordered upon a medical apologia.[8]

As such, Sade's work situates itself in the public debates about medical science and regeneration following the Reign of Terror. Sade took issue with the medical ideology of regeneration, as envisioned by doctors such as F.-X. Lanthenas and Pierre Cabanis, because these crusaders wanted to eradicate libertinism, something that for him constituted an ethical and social ideal. He responded to both authoritarian and utopian visions espoused by medical crusaders during the Old Regime and the French Revolution, countering medical power and authority with its own tools. Sade coopted medical science to undermine the moral claims of its practitioners, just as he used literary conventions to attack the moral agenda associated with sentimental writers.

While moored to earlier literary antecedents, Sade's *La Philosophie dans le boudoir* navigated a new course. He used medical science not simply for metaphor or allegory, as with Clarissa's death from nervous exhaustion in Samuel Richardson's novel or with Madame de Merteuil's disfigurement from smallpox in Choderlos de Laclos's *Les Liaisons dangereuses*. Instead, Sade relentlessly applied medicine to plumbing the depths of what it meant to be human and to explain human nature itself. Through this means, he sought to deepen personal character and motivations, both conscious and unconscious, in the realm of creative fiction. In the late Enlightenment, Denis Diderot had anticipated this literary trend, which later bore fruit with Honoré de Balzac and Gustave Flaubert in the nineteenth century. However, Sade gave these medical intersections greater urgency and depth. His appropriations stemmed as much from the sociopolitical setting in which he wrote as from his psychosexual fixations. Prevailing political and scientific conditions mattered. However, no writer had yet taken medical ideas and radicalized them to such a shocking degree.

In *La Philosophie dans le boudoir*, Sade created a cast of terrifying figures, all of whom committed transgressive deeds and spouted blasphemous ideas. Though we know little of the conditions under which he wrote this book, it does contain some clues about its immediate setting.[9] Within its covers, Sade placed a political pamphlet in which he referenced significant events during the French Revolution. These included the storming of the Bastille, the execution of Louis XVI, the fall of Robespierre and the Thermidorian reaction, and the drafting of the new Directorial constitution. This manifesto—the book's centerpiece and a significant statement of Sade's ethical and political beliefs—dates from 1794 or 1795. Sade may have written the other dialogues between 1782 and 1789, sometime when he was incarcerated at the Bastille prison for his libertine activities.[10]

Though Sade may have recycled older material, his underlying agenda remains clear. Sade wanted *La Philosophie dans le boudoir* to bludgeon post-Thermidorean moral and political sensibilities. According to Michel Delon, the book caricatured the "vehemence" of Terrorist ideology and evoked the de-Christianization of the Year II.[11] But beyond sociopolitical issues, medicine also entered Sade's post-Thermidorean politics, becoming a lens through which he could scrutinize the changing sociopolitical landscape.[12]

Divided into seven dialogues, the book focuses upon the debauched Madame de Saint-

Ange—"an amphibious animal"[13]—and the arch-libertine Dolmancé—"the most profound seducer, the most corrupt, the most dangerous man."[14] The storyline imitates the seduction of Cécile de Volanges by Madame de Merteuil and Vicomte de Valmont in Laclos's *Les Liaisons dangereuses*. In Sade's tale, Saint-Ange and her brother Le Chevalier plot to ruin the young Eugénie de Mistival, a girl as "delicious" as she is potentially wicked.[15] Saint-Ange first seduced Eugénie's father, who was himself a wealthy bourgeois figure, and, by enlisting Dolmancé's philosophic and sexual prowess, she hopes to corrupt Eugénie, as well. As Saint-Ange says, "I'll spare nothing to pervert her, degrade her, demolish in her all the false ethical notions with which they may already have been able to dizzy her."[16]

Unlike Laclos's gawky Cécile, Eugénie proves an apt, if not uncanny, pupil. After she arrives at the chateau, Saint-Ange and Dolmancé teach Eugénie basic human anatomy by using their bodies as models. They first explain the male and female genitalia, erotic techniques, orgasm, and birth control—and Dolmancé then assails revealed religion by arguing that nature is only blind matter in motion. Eugénie half-heartedly resists his ideological and sexual assault, responding with religious platitudes. She quickly learns to disregard chastity but pauses upon charity and benevolence. After she is sodomized and masturbated, though, Eugénie plans to murder her mother, a woman she hates with disturbing violence.

In typical Sadeian manner, the libertines juxtapose sex and philosophy. As the highlight of their orgies, Dolmancé reads out loud to them a revolutionary pamphlet titled, "Français, encore un effort si vous voulez être républicains." The pamphlet outlines a detailed plan for national regeneration through new religion, public education, and hygienic manners, and the lecture is applauded by the libertine group.

In the concluding dialogues, Eugénie's father writes to Saint-Ange and warns that his shrewish wife, Madame de Mistival, was on her way to reclaim their daughter. When Madame de Mistival arrives, she can no longer control her child—who sodomizes her with a dildo—and the libertines torture her and infect her with syphilis. Here, in an obscene medical joke, Dolmancé declares, "Ha! by God, that was a better inoculation than Tronchin made in all his life!"[17] Eugénie then sews up her mother's vagina and anus to incubate the disease and to keep her from having more children. As she tortures Madame de Mistival, Eugénie declares: "Look at me, all at once incestuous, an adulterer and a sodomite—and all that from a girl who was just deflowered this afternoon.… What progress, my friends! With what rapidity I travel down the thorny road of vice!"[18]

What is the reader to make of such a text? In telling this story about "the education of a young girl," Sade parodied sentimental fiction and provided what R. F. Brissendon and Maurice Blanchot have seen as a grotesque version of the *Bildungsroman*.[19] Alluding to Laclos's preface in *Les Liaisons dangereuses*—which suggested that mothers should give the book to their daughters on their wedding day—Sade's epigraph declared that "a mother will prescribe reading it to her daughter."[20] Like sentimental writers, Sade was often didactic, but instead of promoting moral rectitude, he wanted to defend libertinism as a lifestyle and as an ideal. As Simone de Beauvoir explains, Sade made sexuality into a personal ethic and projected this ethic onto his literary works.[21] This "immense system," as Beauvoir calls it, rejected the moral ideas upheld by intellectual authorities. *La*

Philosophie dans le boudoir offered an alternative conduct manual—"vice for dummies," so to speak—that promoted a deeper intellectual and physical enlightenment.

In this superhuman conversion, the libertine recognized nature's true impulses and the ethical consequences that followed. P.-H. Thiry d'Holbach—whose *Système de la nature* (1773) Sade both admired and borrowed from, which described enlightenment in similar terms. For d'Holbach, himself an atheist and materialist philosopher, enlightenment needed "a most determined, a most undaunted courage—it is never effected but by a preserving resolution to act, to think for himself; to examine with rigor and impartiality the opinions he has adopted."[22] Sade's protagonists show d'Holbach's "undaunted courage" and assert their lifestyle in the face of conventional opinion—making pleasure, as Sade's frontispiece declared, into the only thing that the human heart understood and obeyed (fig. 2.2). In describing her libertine conversion, Eugénie declares: "I came here to be instructed and I shan't leave until I have been enlightened."[23]

Medicine constituted an essential part of this self-enlightenment. However, Sade's appropriations evolved in a concrete historical setting. Here he entered the public debate about morality, social class, and the family in Old Regime and revolutionary France, a debate in which medical crusaders hoped hygiene could reform debauched patrician mores and regenerate the polity. As we have seen in chapter 1, a far-ranging panic about the health and fertility of the French population drove this new medical activism, and prominent doctors alleged that libertinism had weakened the human constitution and thus caused degeneracy and demographic decline.[24] To extirpate "luxury and debauchery," prominent medical crusaders advocated moral hygiene for perceived high-risk groups, above all members of Sade's aristocratic class and other libertine free spirits.[25] Appealing to virtue and patriotism, medical practitioners condemned urbane society and countered with an ascetic lifestyle of family values, now sanctified under the halo of medical authority. Sade mocked all of this, knowing that he would have qualified as the moral hygienist's *bête noir*, the antithesis of everything these crusaders stood for.

l'Habitude un inſtant cauſe en nous quelqu'allarme
Maiſ bientôt dans un cœur à la raiſon rendu,
Le plaiſir parle en maître et ſeul eſt entendu.

FIG. 2.2. Frontispiece from *La Philosophie dans le boudoir*. Athena, goddess of reason, is surrounded and undressed by desire. Sade's central message involved fusing reason and desire to attain a higher level of sensual being, and medicine was part of this physical and moral mastery.

Sade attacked this ideology of physical and moral regeneration in *La Philosophie dans le boudoir*. In some ways, he offered an analogy to the anti-psychiatric literature written by former asylum inmates in Georgian England, such as William Belcher, Samuel Bruckshaw, and Alexander Cruden. Though Sade no doubt had particular doctors in mind—one thinks of Samuel-Auguste Tissot and his great anti-masturbation crusade—he failed so much to "name names" in the medical establishment as he attacked generally held ideas.[26]

Drawing upon medical thought, Sade believed that libertines first needed to understand mind, body, and nature in purely materialist terms, grounding all of them in a biomedical conception of life and health. Sade thus returned to more radical doctors and philosophes such as Julien Offray de La Mettrie and Denis Diderot. These philosophes saw nature as "creative evolution"—full of spontaneity, freedom, and invention—in which life was but a particular manifestation of matter and energy.[27]

But Sade pushed this medical radicalism. In his view, the universe lacked harmonious design or meaning; rather, death and destruction ruled the living world. For this reason, "nature caused man to be born alone, all independent of each other."[28] There was no human community, hence no conventional morality and ethics. As Sade concluded, there was nothing "either fundamentally good, nor fundamentally evil; everything is relative, relative to our point of view, that is to say, to our manners, to our opinions, to our prejudices."[29]

Sade's libertine protagonists use these medical insights to cultivate their innate physical and moral qualities. They combined a special physical organization and an autonomous will and thus became superior creatures in the order of nature. Libertines, in Sade's view, were unable to separate medicine and eroticism; they needed to understand their bodies in order to heighten pleasure and pain (figs. 2.3–6). Unsurprisingly, Dolmancé and Saint-Ange begin to corrupt Eugénie by teaching her about human anatomy and physiology. Within Saint-Ange's elaborate boudoir, filled everywhere with mirrors, the protagonists take turns on her ottoman couch playing the *écorché* like an anatomist dissecting in a surgical amphitheater. Their bodies reflected "in a thousand different ways," they make sure that "no part of anyone's body can be hidden … everything must be seen."[30]

According to Dolmancé and Saint-Ange, the libertines must identify, name, and catalogue each body part. This taxonomic precision allowed them to calculate erotic experience and thus move into a transcendent realm of experience. In their sexual encounters, Saint-Ange tells Eugénie, libertines exploited all their body parts. The anus, the mouth, the breasts, and the armpits all could "provide altars upon which to burn [their] incense."[31] After undressing their young apprentice, Dolmancé first explains the breasts, the male "member," and ejaculation, while Saint-Ange touches Eugénie's genitalia and "spreads wide her buttocks and shows the anus."[32] Saint-Ange presents the male anatomy to her (providing both technical and colloquial terms for each part) and then focuses Eugénie's gaze upon her own body. Within Sade's universe, human bodies lost their metaphorical and metaphysical meanings. They became mere "pleasure machines," blind automata that manufactured and consumed sexual experience.[33]

Above all, libertines used medicine to control health and fertility. The reasons were

unequivocal. Saint Ange teaches: "A pretty girl ought simply to concern herself with *fucking*, and never with *engendering*."[34] In fact, Saint Ange hates procreation so much that she warns Eugénie that "I should cease to be your friend the instant you were to become pregnant."[35] "Eugénie," she explains, "be the implacable enemy of this wearisome child-getting, and even in marriage incessantly deflect that perfidious liquor whose vegetation serves only to spoil our figures, which deadens our voluptuous sensations, withers us, ages and makes us fade and disturbs our health."[36] Aroused by these statements, Eugénie begs her mentor to teach her birth control. This sex education scenario often appeared in Enlightenment clandestine literature; the anonymous *Thérèse philosophe* (1748), for example, gave readers a crash course in *coitus interruptus*.[37]

However, Sade moved beyond these earlier writers on account of his graphic detail, proto-Malthusian politics, and emphasis on anal sex.[38] As Saint-Ange puts it, a married woman must dissuade her husband from having children. She should tell her husband how much she dislikes babies and point out the advantages of having none. The wife must always interest her husband with the non-procreative orifices of her body, and, once she had exhausted these charms, she ought to use birth control devices like vaginal sponges and condoms. Saint-Ange tells Eugénie: "A girl risks having a child only in proportion to the frequency with which she permits the man to invade her cunt."[39] For these reasons, the libertine preferred sodomy both for its sensual delights and its utilitarianism. Saint-Ange teaches, "It is a pleasure incontestably superior to any sensation procured by this same introduction in front. And, besides, how many dangers does not a woman thus avoid! Fewer risks to health, and none at all of pregnancy."[40]

By confounding propagation, libertines turned sex into a self-conscious political act, a point that several doctors would also pick up in the early 1800s. In his attack on moral hygiene, Sade railed against those "fools and propagators" who thought that nature mandated procreative sex. Death, not birth, was the origin of life. Drawing upon naturalist G.-L. Leclerc de Buffon's *Les Époques de la nature* (1778), Sade argued that death and decay gave nature her generative powers, because they provided the primordial organic matter with which she endlessly invented new beings.[41] For these reasons, nature had created things like extinction, menopause, and even a so-called species of sodomites to maintain death's empire.

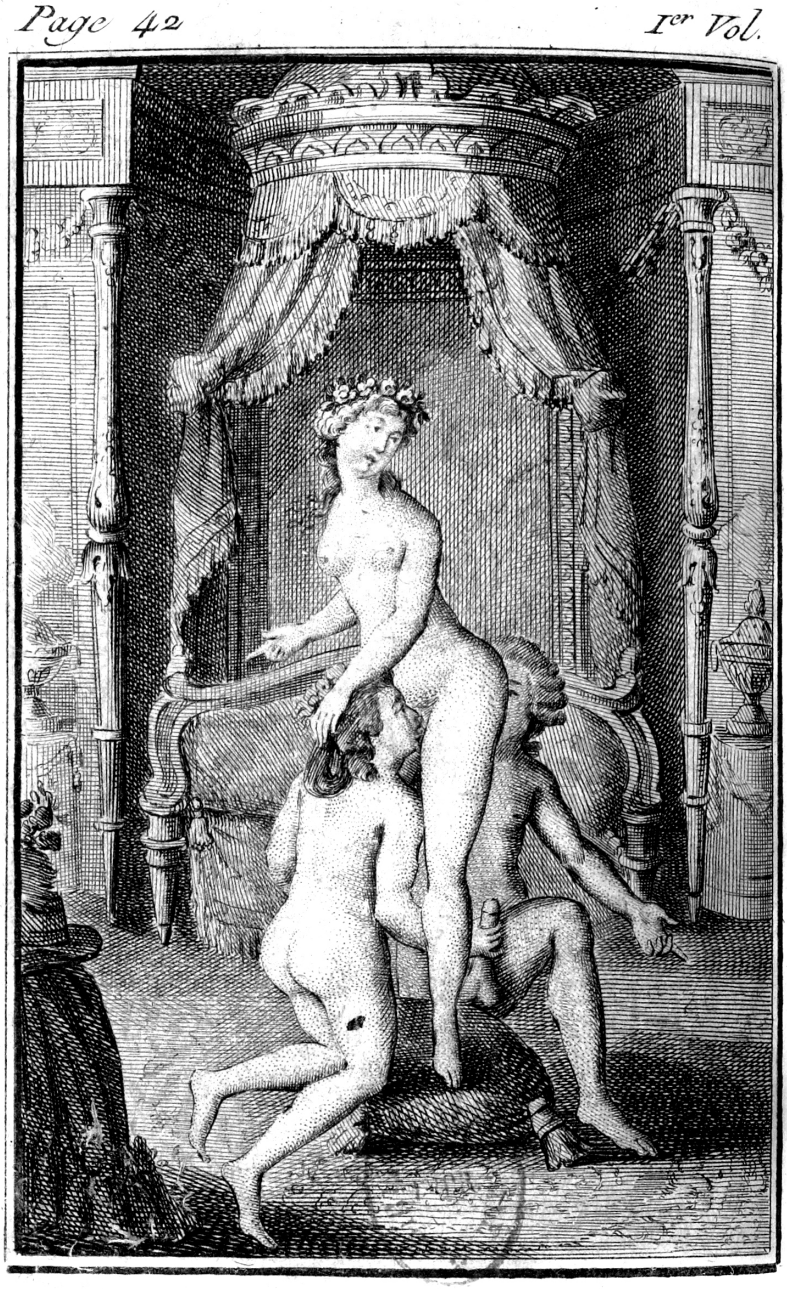


Fig. 2.3. Engraved plate from *La Philosophie dans le boudoir*. Sade's libertine scenarios often boasted a commingling of bodies, values, desires, and social and gendered hierarchies. The boudoir itself became a site of self-knowledge and bodily discipline and control.

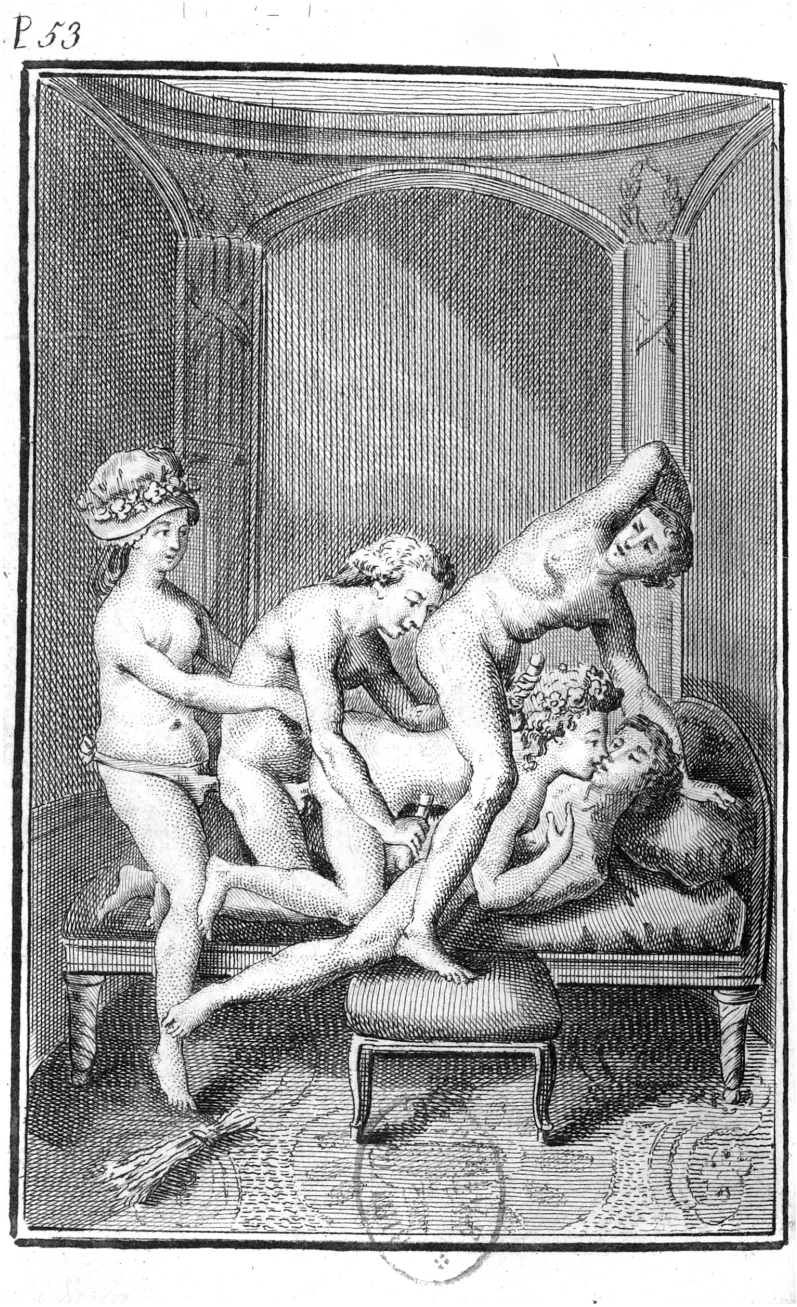


Fig 2.4. Engraved plate from *La Philosophie dans le boudoir*.

At the same time, Sade argued that recreational sex was not inherently bad and that it did not cause deleterious side effects. Sade's likely target was the anti-masturbatory campaigns adopted by prominent hygienists such as Samuel-Auguste Tissot, whose famous book *L'Onanisme* (1764) was one of the bestsellers of the eighteenth century. According to these doctors, spermatic loss caused physical debilitation, madness, sterility, and even death; and they denounced all sexual activity that violated bourgeois norms of self-restraint and moderation.[42] But Sade's libertines defy these medical warnings and flaunt their profligate sexual heroics—Herculean in strength and violence—as if to show that sex did not make people sick. To underscore this point, Sade's libertines literally regenerate themselves after their violent orgies and seem almost immune to their decadence and debauchery. In *Justine* and *L'Histoire de Juliette*, for example, the female heroines regain their pristine beauty after their escapades—rather like Dom Augustine Calmet's vampires, which could only be destroyed by supernatural means (note that a bolt of lightning, almost a *deus ex machina*, ended Justine's suffering).[43]

Above all, Sade argued that innate material forces determined the individual's moral life. This biomedical hardwiring, he thought, overrode all other forms of human socialization and experience—and challenged the sentimental belief that the family promoted individual intimacy and fulfillment. The family, as Sade claimed, was a social, not a natural institution, and he hated its arbitrary and despotic powers. In all likelihood, Sade's opinions developed because his wife's family had him imprisoned for his libertine behavior. These experiences perhaps drove Sade to hate all maternal figures, a hatred that Pierre Klossowski has diagnosed as his "negative Œdipal complex."[44]

More interesting than the psychoanalytic insight, though, is how Sade turned medicine around to assail these domestic and hygienic ideals. He drew upon naturalist and medical debates about the generation of animals—many of them erotic and subversive in tone—to form an idiosyncratic model of sexual reproduction.[45] During this period, naturalists and doctors hotly debated the generation of living beings. These intellectuals wondered whether living matter could spontaneously organize itself or whether some outside agency determined organic form and development. For this reason, embryology drew impassioned debate because it questioned God's power in the living world. As Denis Diderot argued in his *Le Rêve de d'Alembert*: "Look at this egg: with it you can overthrow all the schools of theology and all the churches in the world."[46]

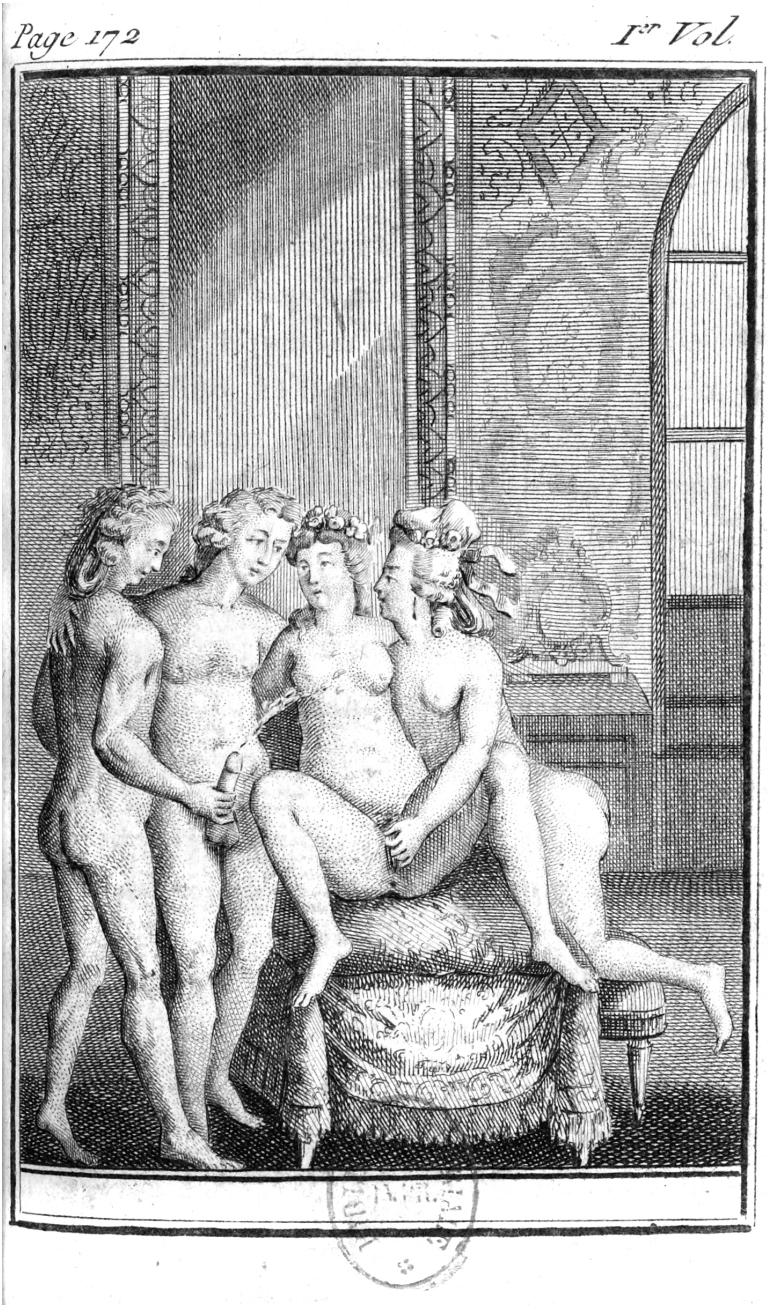


Fig 2.5. Engraved plate from *La Philosophie dans le boudoir*.

By the late Enlightenment, there were two major theories about generation: preformation and epigenesis. The first, influenced by rationalist philosophy, saw the embryo (sometimes called a homunculus) as preformed in the mother's egg or father's seed and, at the moment of fertilization, it expanded in a purely mechanical fashion. A peculiar variant of this thought, called preexistence, believed that God had encased all possible beings in the human seed, so that organic form was an immutable essence, one that existed before all time. Embryological growth and development were, as naturalist Charles Bonnet put it, "the simple evolution of what was already engendered."[47]

By contrast, the epigenetic view, pioneered by P.-L. de Maupertuis and G.-L. de Buffon, claimed that the embryo developed out of a mass of organic molecules that arranged itself through chemical attraction or the species' interior mold. Because epigenesis stressed that children received material factors from both parents, it explained a wider range of individual variations and hereditary anomalies, suggesting that reproduction and development were dynamic, open-ended processes that lacked a Creator.[48]

Ironically, while epigenesis was the more materialist theory of generation, Sade clung to an older view of preformation—called animalculism or spermism—though naturalists had by and large discarded it by the 1790s. Originally, microscopists such as Antoni van Leeuwenhoek and Nicolaas Hartsoecker argued that the homunculus was preformed in the male semen and women simply gave the fetus a place to gestate. For this reason, as La Mettrie explained in the 1740s, the female seed seemed "useless to generation." As he saw it, "the male does all the work, both in a woman fast asleep as well as in the most lustful woman."[49]

Given these observations, Sade argued that women were passive participants in the act of generation and only acquiesced to their husband's desire. There was no active will or agency involved. In biological terms, a woman gave nothing to the child but a womb to grow in. For these reasons, he claimed: "A mother, for having carried us in her womb, instead of deserving some gratitude, merits nothing but hate, since it was for her pleasure alone and at the risk of exposing us to all the ills and sorrows that world holds in store for us that she brought us into the light, with the sole object of satisfying her brutal lubricity."[50]

Fathers were different. For Sade, the father had wanted a child by initiating sexual activity—whether by impulse or conscious choice—and the child somehow inherited the memory of this libidinous desire. In *La Philosophie dans le boudoir*, Eugénie and Dolmancé affirm these feelings of paternal attachment, noting how they loathed their respective mothers but adored their fathers to the point of folly. Medical science, to their satisfaction, had dispelled domestic ideology and pointed to a hard-nosed natural truth about the family. It was, they thought, a biological accident, not a divinely or naturally sanctioned institution. In the final dialogue, when Madame de Mistival tries to exercise her "sensible rights" over Eugénie, Dolmancé uses embryology to annihilate her claims to maternal authority. He concludes:

> What are these rights, Madame, if you please? Do you flatter yourself that they are legitimate? When Monsieur de Mistival, or whoever it was, spurted into your

> vagina the drops of come that brought Eugénie into being, did you then have her in mind? Did you? Well, then, how can you expect her to be beholden to you today for your having discharged when someone fucked your nasty cunt? Take notice, Madame, that there is nothing more illusory than a father's or a mother's sentiments for their children, and children's for the authors of their days. Nothing supports, nothing justifies, nothing establishes such feelings in use here.[51]

So while children failed to love their parents "naturally," parents in turn felt no "natural" love or real responsibility for their children. This was particularly true for women. Though a mother was useless to generation, she still owned what she carried in her womb and could dispose with this property as she saw fit. As a result, abortion and infanticide were legitimate acts of self-interest or personal autonomy. Equating abortives and laxatives, Saint-Ange tells Eugénie, "we are always mistress of what we carry in our womb, and we do no more harm in destroying this kind of matter than in evacuating another, by medicines, when we feel the need."[52] She herself confesses to having had at least two abortions and boasts that two friends used similar techniques midway through pregnancy and had succeeded in this operation. Dolmancé denies that abortion was a "capital crime" because the fetus lacked a soul. Embryology proved that human development was a "material mechanism" no more wondrous than the "vegetation of a grain of wheat."[53]

At the same time, the French Revolution turned this biological fact into an inalienable right. Revolutionaries gave people rights over their bodies—all Frenchmen shared self-sovereignty—and this right gave them the power to control their sexuality and fertility, as well. In this regard, Sade parodied Idéologue philosophers like Constantin Volney, who hoped that moral hygiene could help shape responsible citizens. So long as citizens learned self-control, Volney said, they could use their bodies as they saw fit: "Every one is the absolute master, the entire proprietor of his body."[54] Sade turned this ideology of self-sovereignty on its head and used it to defend sexual sovereignty. Following this logic, Dolmancé argues

Fig 2.6. Engraved plate from *La Philosophie dans le boudoir*.

> that it was impossible to demand of an individual whomever to become a father or a mother if he or she does not wish it; that this creature, whether one more or fewer on earth, was not otherwise of great consequence; and that we become, in a word, as much of a master of this morsel of flesh, however it might be animated, as we are of the nails we clip from our fingers, the moles we cut from our body, or the food that we push through our bowels, because one and the other are from us, because one and the other are our own, and because we possess absolutely what emanates from us.[55]

In this discussion, Sade moved from reproductive rights to population policy, denouncing pro-natalist policies. In *Justine* (1791), for example, the libertine Dubourg insists that "there are more subjects in France than are needed"; therefore, "bastards, orphans and malformed infants should be condemned to death immediately at birth."[56] The poor, Dubourg says, are "like those vegetable parasites which, attaching themselves to sound plants, cause them to deteriorate by sucking up their nutritive juices."[57] In later works, Sade used comparative anatomy to classify the poor alongside chattel slaves and domestic animals. "The man of the people," he said, "is simply the species that stands next above the chimpanzee on the ladder [of Nature] and the distance separating them is, if anything, less than that between him and the individual belonging to the superior caste."[58]

In Sade's fiction, this sense of biological superiority justified unbelievable cruelty toward the poor, including framing innocent people, withholding alms, giving out contaminated food, poisoning children's milk, burning poor houses, and blowing up destitute families over mine shafts, to list a few.[59] In these instances, Sade's libertines declare that the French population had overstepped its material resources, and society could only prevent political disaster by eliminating the lower classes. As Angela Carter noted, these brutal scenarios underscore how class prejudice played into Sade's fantasies.[60]

In *La Philosophie dans le boudoir*, Sade assailed population politics. The anonymous political pamphlet in the fifth dialogue, "Français, encore un effort si vous voulez être républicains," gave his definitive views on health and population, but embedded them in the broader discussion about physical and moral regeneration during the French Revolution. As a finale to the libertine orgies, the pamphlet parodies the educational and hygienic utopias that circulated in revolutionary France. According to the unknown author (perhaps Sade himself in a cameo appearance), physical and moral regeneration needed new manners and morals, which would channel the vital drives released by the revolution and create a reborn society. To achieve this revolutionary state, society must dismantle all law. A free and egalitarian society must level rank and privilege through calumny, theft, murder, prostitution, incest, rape, and sodomy. The pamphlet explains that the republic's state of permanent war and insurrection needed a state of permanent immorality:

> The republic being permanently menaced from outside … we cannot imagine that the means to its preservation could be *moral means* since the republic will preserve

> itself only by war, and nothing is less moral than war. Now, I ask how one can demonstrate that in a State made immoral by its obligations, it is essential that the individual be *moral*? I will go further: it is a very good thing they are not.… Insurrection … is not at all a *moral* state; however, it must be a republic's permanent state. It would therefore be no less absurd than dangerous to require that those who are to insure the perpetual *immoral* subversion of the established order [*la machine*] themselves be *moral beings*: for the *moral* state of men is one of tranquility and peace, while the *immoral* state is one of perpetual unrest that pushes man to, and identifies him with, the necessary insurrection in which the republican must always keep the government of which he is a member.[61]

To achieve this "permanent immorality," the republic must transform sexual relations, and medicine had a special place in this massive project of social engineering. Interestingly enough, this new republican morality also included a bizarre vision of women's political emancipation, a point to which other postrevolutionary writers would return. As the pamphlet claims, the republic must destroy traditional sexual roles. This rhetoric fills *La Philosophie dans le boudoir*. Earlier in the dialogues, Saint-Ange hoped that revolutionary legislators would remember women when promulgating the universal rights of man. In her view, women's political emancipation promoted sexual emancipation; therefore, young girls should "boldly fling off and spurn the shameful irons wherewith others presume to keep them subjugated."[62] Women may submit to men, but they should never sacrifice their liberty. In an astonishing passage, she tells Eugénie to "break your shackles at no matter what cost."[63] Since libertines were sexual beings, Eugénie must embrace her physical destiny. "Fuck, in one word, fuck," Saint-Ange says, "it was for that you were brought into this world; no limits to your pleasure save those of your strength and will.… Your body is your own, yours alone, in all the world there is but you who have the right to enjoy it as you see fit."[64]

In the end, however, Dolmancé and Saint-Ange opted for traditional gender roles and put women on an inferior rung on the social order. For Sade, male desire always trumped women's autonomy and agency, and his characters become mouthpieces for this belief. As Saint-Ange tells Eugénie, "A woman's destiny is to be like the canine bitch, like the she-wolf; she must belong to all who claim her."[65] By emancipating women, men promoted their freedom and sexual autonomy, though they should never forget that women were still biologically inferior to them. "If Nature's intent hadn't been that men possess this feeling of superiority," Dolmancé says, "she would not have created weaker than him the beings she destines for him at those moments. The debility to which nature condemned women incontestably proves that her design is for man, who then more than ever enjoys his strength, to exercise it in all the violent forms that seem best to him, even by means of tortures, if he be so inclined."[66]

The pamphlet takes Dolmancé and Saint-Ange's ideas about sexual availability to their logical extreme, as the author wanted to force all women into large hygienic houses of prostitution (so-called "temples of Venus"). In this state, women would be sexually available to every male citizen, while these women could now exercise the personal liberty "to enjoy all those they deem worthy to satisfy them."[67] The author applies an

extreme reductionism. In "keeping with natural law," he says, men could not possess women at all times, because marriage and monogamy meant a monopoly privilege—something that the revolution had in principle abolished. Rather, in an egalitarian society, men received the "legitimate right" to enjoy temporarily any woman's body. The pamphlet concludes: "it is a question of enjoyment only, not of property.… I have no real right of possession over such-and-such a woman, but I have incontestable rights to enjoy her; I have the right to force from her this enjoyment, if she refuses me for whatever the cause may be."[68]

Here again, Sade transposed medical values. Starting with doctors such as Charles-August Vandermonde, who had written an important book on generation and human perfection, doctors had hoped that sexual hygiene could regenerate domesticity and civic virtue. In eugenic fashion, Joachim Faiguet de Villeneuve's *L'Econome politique: Projet pour enricher et pour perfectionner l'espèce humaine* (1763) expanded upon these beliefs. Faiguet argued that the absolutist state should ban unions between "feeble, thin and delicate peoples, those who are too diminutive, too deformed and so many other subjects vitiated in heart and spirit" by placing undesirable elements in religious convents.[69]

In unpredictable ways, erotic writers applied this thinking to illicit sexual practices. Pornographic works, such as *Déclaration qui fixe les droits et honoraires attachés aux fonctions des filles de joie* (ca. 1780) and *Les Bordels de Paris* (1790), created utopian projects to rationalize prostitution and promote sexual accessibility. *Les Bordels de Paris*, for instance, imagined building a brothel in each *faubourg* in the city. Financed by enterprising capitalists, these houses would contain 400 women and be serviced by an abbess and a physician.[70] In one famous example, Nicolas Restif de La Bretonne's *La Pornographe* (1769) proposed that the government make "Parthenions" or public houses of prostitution. These Parthenions would manage all aspects of sex work, including employment schedules, registration, fees, medical care, and so on. As Restif de La Bretonne thought, these micro-managerial techniques could counterbalance the moral and health consequences of unregulated prostitution.[71]

For Sade, these hygienic houses promised to annihilate conventional morality because sexual accessibility between men and women dissolved family bonds. In this new political landscape, the republic legislated fathers and mothers out of existence and thus mandated adultery, divorce, and sexual freedom. In a true republic of "liberty, equality, fraternity," all citizens should become illegitimate children, since the family fostered only particular and egoistic interests. The pamphleteer asks: "What does it matter in a republic where every individual must have no other mother than the nation, where all children are the nation's children?"[72]

The fraternal republic thus rejected paternity and patrimony. Even incest lost its primal taboo and instead became a new social norm. In a free society, people should not deny themselves from enjoying the things they loved most, including—shockingly enough—members of their own family. Like rape, which damaged property but failed to destroy it, incest overturned family bonds and allowed citizens to establish themselves as self-sovereign beings.[73] For these same reasons, the pamphlet advocated sodomy as a patriotic act; in any case, "the habit for men to live commonly together in republics renders this vice more frequent."[74] War, especially, made sexual segregation unavoidable.

Under these conditions, sodomy cemented the fraternal and egalitarian bonds needed to maintain a bellicose republic.

These hygienic temples ushered in a new demographic regime, a regime that should perpetuate the republic's "ferocious state." Sade's pamphleteer stated: "The human race must be purged from its cradle."[75] Although the republic should not take the horrific step and exterminate living people in massive numbers, it should educate the next generation. That said, the pamphleteer urged legislators to prune the current crop through indirect means. Parents should expose or kill poorly formed or "vicious" children. Women should practice abortion indiscriminately, and the poorhouses and orphanages for "the vile scum of mankind" should be razed. In short, "every individual born lacking the qualities to become useful someday to the republic has no right to live and the best thing for everyone concerned is to deprive him of life the moment he receives it."[76]

Sade thus assailed many of the key beliefs of the hygienic crusaders and pro-natalists. Anticipating Thomas Malthus's *An Essay on the Principle of Population* (first published in 1799), he argued that overpopulation threatened the stability of the social order. If fertility surpassed resources, poverty increased and the regime was threatened by dearth and disorder. But if the republic could prune its populace, "it can make traffic of its superfluity."[77] Cynically appropriating anti-royalist rhetoric, the pamphleteer suggests that despots measured wealth by the number of their slaves—hence the absolutist state's pro-natalist policies—but this surplus population caused sedition and corruption. The text concludes with the following warning: "Beware of too great a multiplication in a race whose every member is sovereign, and be certain that revolutions are never but the effect of a too numerous population."[78]

Sade continued to discuss population politics in his later works. In the multivolume *L'Histoire de Juliette*, which he published between 1799 and 1801, the heroine Juliette flees to Rome after she rejected the vicious libertine Saint-Fond's plans to exterminate the poor of France. In the Vatican, however, she finds similar projects brewing among doctors, clergymen, and bureaucrats. This time, instead of yielding to her moral inhibitions, Juliette now plots with Dr. Bracciani and Monsignor Ghigi to bomb all the hospitals and incinerate the poor quarters of the Eternal City. She and her companion Olympia then masturbate each other on her palazzo terrace while watching the city go up in flames. She boasts that the chaos lasted eight days and some 300,000 people were burned alive. In justifying these acts, Ghigi says:

> I consider charitable institutions the most baneful things a large city can contain; they drain the people's energy, they soften its fibre, they promote sloth; they are in every sense pernicious; the needy individual is to the State as a parasite branch is to the peach tree: it causes it to wither, drinks its sap and bears no fruit.… My desire is that instead of bestowing a groat upon these misfortunates we concentrate our efforts on wiping them out; my desire is that they be totally eliminated, extirpated; exterminated; … killed as one kills a breed of noxious animals.[79]

As in "Français, encore un effort," Ghigi complained that civil society put the general interest over individual rights. In classic social contract theory—going back to Hugo

Grotius, Samuel Pufendorf, and John Locke—individuals gave up personal rights in order to enjoy personal security within a community. But as individuals sacrificed their sovereignty to the general good, they gave up their use-pleasure: "for every occasion upon which the law protects him there are a thousand others when it restricts him."[80] As an antidote, Ghigi wanted a revolution to release all repressed "energy and vitality" and challenge the state's monopoly on violence. Like the pamphleteer in *La Philosophie dans le boudoir*, Ghigi wanted to recast society along what he deemed to be more "natural" lines. In contrast to the virtuous, transparent society imagined by the French revolutionaries, libertines saw nature for what it was: unbridled self-interest and war.

Nevertheless, Sade differed from seventeenth-century theories of government. His political ideals were not those of Thomas Hobbes, who had seen the state of nature as the perpetual "war of every man against every man."[81] Turning Hobbes upside down, Sade's post-Thermidorean libertines argued that the social contract must acknowledge the primal urges found in natural man and channel them into deeper forms of self-expression. For Sade, a just society admitted that human nature had a dark side and avoided repressing it with social conventions. As his primary political and ethical point, he argued that individuals established relationships based upon need and use, not benevolence and altruism. Large-scale sociability was a farce.

In this manner, Sade rejected the Enlightenment moral philosophy associated with the Third Earl of Shaftesbury and J.-J. Rousseau (a philosophy that inspired the didactic elements of sentimental fiction). For him, humans lacked an innate "sympathy" or "benevolence," so the community could not rely upon these qualities to build a happy and just social order. By contrast, Sade's self-sovereign man sought utopian escape in darkest recesses of private life, joined by an elect, intimate community.[82] There, they created a Gothic space of negative liberty. For these libertines, the boudoir resisted the penetrating gaze of law, public opinion, and moral authorities like doctors. It anticipated the utopian spaces that doctors and like-minded thinkers imagined in the years following the Reign of Terror, such as how medical writers promoted the private sphere as a place of nurturing particular values and political perspectives, or in the way that young medical men congregated in intimate groups around charismatic figures (as with Xavier Bichat and Jean-Galbert Salvage).

Medicine, thus, became a crucial part in how Sade reimagined human nature and society in the wake of the French Revolution. His libertine protagonists assert, repeatedly, that they are born in a particular way, as if they were hardwired in a biological sense. At the same time, however, they insisted that they needed to hone and refine this born identity. One might be a natural-born libertine, but one had to make something out of it. Libertines thus required education and experience. Their instincts, their inherited identity, demanded both. For this reason, medicine encouraged self-mastery and self-knowledge; in the right hands, it could subvert the moral agendas of political, religious, and even scientific authorities. Therefore, Sadeian libertines rejected the medical crusaders of the Old Regime and revolutionary years, believing that their peculiar lifestyle offered a deeper route to physical well-being and individual happiness.

In the postrevolutionary setting, medicine informed Sade's libertine philosophy on three fronts. On a philosophic level, Sade's libertine protagonists used medical systems to

counter mainstream ideologies—theological, absolutist, naturalist—that supported entrenched moral agendas and values. On a personal level, they used medical science to command their minds and bodies, so that they could intensify their experiences of pleasure and pain. Finally, on a political level, these libertines drew upon the life sciences to challenge Old Regime and revolutionary policies about reproduction, the family, and public welfare, above all those enshrined in revolutionary discourses about physical and moral regeneration. It gave them a social vision of their own, one that was utterly anarchic and violent.

With Sade, medicine, pornography, and the larger world of ideas coalesced in striking but destabilizing ways. His writing contains a dynamic that would characterize the medical subcultures and genres of the postrevolutionary decades. The fundamentals all appear in his works. Here, Sade incorporated medical ideas and language to fashion his model of human nature. He sought to reimagine and redesign social and political realities and to proffer new ways of understanding and experiencing the body, both one's own and those of other people. Through these means, he dreamed about shattering sexual and domestic norms and sweeping away the shards. The uncertainties and traumas generated by the French Revolution rendered these biomedical appropriations more urgent and poignant, inscribing themselves in the pages of his books and substantiating his shocking imagination and language.

Sade's writings, on the heels of the Reign of Terror, heralded how biomedical science would infuse the world of art, literature, philosophy, and politics, proving itself to be a creative but ideologically malleable force in intellectual life. It was also useful, applying itself to fundamental realities. I should pause upon the cultural dynamic underlying Sade's appropriations. In his classic anthropological study *La Pensée sauvage*, Claude Lévi-Strauss used the term *bricolage* to describe how ordinary people use objects to think through everyday experiences, making "classificatory schemes which allow the natural and social universe to be grasped as an organized whole."[83] Following Lévi-Strauss's insight, medicine appears as a classificatory tool with which French people started to make sense of their social realities and personal experiences. It was, in other words, something good to "think with."[84] It allowed individuals to see and understand the world around them, situating themselves as moral agents and giving them control over their surroundings. Like those other writers who would follow him, Sade grasped this cultural and political possibility in biomedical science and co-opted it into his writing.

Such an approach counterbalances those historical and sociological analysis that emphasizes the moralizing, didactic, or evening dehumanizing elements of medical thought during in the eighteenth and early nineteenth centuries. These analyses—which often borrow from Michel Foucault's idea of "bio-power"—can overlook the creative or subversive tendencies in medical culture or how medical discourse can embody contradictory interests, politics, and social positions.[85] This is not to deny the normalizing or proscriptive elements at work in postrevolutionary medicine. Sade's clandestine writings, as this chapter has argued, offered a broadside against this type of thinking. Nevertheless, social control approaches can overstate the ideological coherence of medical thought and how these hegemonic desires (whether conscious or not) played out

in the real world. In the postrevolutionary years, medical power and authority were not monolithic, even when its practitioners advanced concrete agendas, as will be shown in the following chapter on doctors and women.

For these reasons, Sade constitutes the starting point for studying the medical subcultures and genres of the postrevolutionary period. Clearly, he was no ordinary reader of medical books, and his social vision was shocking and extreme. As a close reading of clandestine books suggests, however, Sade used medical science to comprehend radically changed circumstances. It allowed him to impose himself, in intellectual terms, upon this new cultural and social reality. His works reveal both the possibilities and limits afforded by these appropriations, underscoring how medicine, in this highly charged setting, offered a means of framing the new realities created by the French Revolution. He was not isolated in using it to think, to create, and to act in this new world.

CHAPTER 3

Writing Sexual Difference

The Natural History of Women and Gendered Visions, ca. 1800

Sade was not alone in using medicine to puzzle out the new political and social realities created by the French Revolution. In the years following his *Philosophie dans le boudoir*, authors published a stream of books that treated what they called "the natural history of women." The eminent Pierre Cabanis introduced the subject in his inaugural lectures at the Institut National de France in 1796, and the books started rolling off the presses: Jean-François de Saint-Lambert's *Analyse de l'homme et de la femme* (1800–1801), Jacques-Louis Moreau de la Sarthe's *Histoire naturelle de la femme* (1803), Gabriel Jouard's *Nouvel essai sur la femme* (1804), Louis-Victor Bénech's *Considérations sur les rapports du physique et du moral de la femme* (1819), and Julien-Joseph Virey's *De la femme, sous ses rapports physiologique, moral et littéraire* (1824). To this mix, one could add the well-known poet and critic Antoine-Léonard Thomas (1732–1785), whose *Essai sur le caractère, les moeurs et l'esprit naturel de la femme*, an apologia for female talents, appeared in a new edition in 1803, and whose timing capitalized upon reader interest.[1]

These books were written by an eclectic group of doctors, naturalists, and self-styled men of letters, all of whom wished to explain the physical and moral qualities of women in their entirety. In their eyes, previous authorities—doctors, anatomists, naturalists, metaphysicians, moralists, and philosophes—had failed to grasp women's true nature and social role. "We've written much about women," regretted one doctor. "We've celebrated their charms, their merits, their beauty; but these objects of universal worship

have hardly ever been a subject of research and meditation among the learned [*savants*]."[2] However, with the natural history of women, savants could understand the female mystique and reveal her mind and body: an attitude later captured, for example, in Louis Ernest Barrias's sculpture *Nature Unveiling Herself before Science*, a work displayed in the foyer of the Paris medical faculty.[3] Scientific authorities could identify women's true vocation: the family.

This natural history of women was unique to French sciences and letters—no exact corollary exists in English, German, or Italian—and so historians might approach these books as constituting a unique medico-scientific genre, part of the new medical subcultures and styles that marked the postrevolutionary period. It differed from other medical writings on gender and healing, notably gynecology and obstetrics, because the natural history of women was decidedly *nontherapeutic*; writers focused less on female disease and healing treatments than on philosophical questions about women's minds, bodies, and ethnic varieties. In adopting this approach, these writers distilled cutting-edge scientific and social thought: the Montpellier vitalists' medical science of man; C.-L. de Sécondat de Montesquieu's and M.-J.-A.-N. de Caritat de Condorcet's sociological works; Jean-Jacques Rousseau's moral anthropology; recent ethnographic and travel literature; Félix Vicq d'Azyr's and Georges Cuvier's work on comparative anatomy; Charles Bonnet's and Lazzaro Spallanzani's embryological researches; and new clinical theories associated with the Paris hospitals.

With these books, writers provided lay readers with new medical, naturalist, and social-scientific ideas about women. The texts also contained a personal and social agenda: namely, these writers wanted to contribute to public discourse and shape general attitudes and behavior about sexuality and the family. Though these writers often hearkened back to mid-Enlightenment debates about women's role in society,[4] they also responded to experiences arising from the French Revolution itself: how leading figures such as Condorcet, Charles-Maurice de Talleyrand, and L.-M. Le Peletier de St. Fargeau had debated women's access to public education; how ordinary women had participated in civic debate, revolutionary clubs, and collective politics; and how feminist luminaries such as Marie Olympe Aubry de Gouges had challenged patriarchal authority and asserted women's rights in public life.[5] French society, it seems, was rethinking conventional gender roles—Sade was but one extreme example—but for some contemporaries, it created fear and anger, and they reacted in hateful and cruel ways.[6] Given these political considerations, public authorities and intellectuals wanted to examine women in a new scientific light and understand what was changing around them.

This chapter shows the strong interconnection between medical genre, gendered visions, and new sociopolitical realities after the Reign of Terror. The natural history of women functioned on several different levels. In the first place, the authors sought to influence how their readers thought about gender roles following the French Revolution. They wanted to bring their specialized knowledge to bear upon women's character and constitution and thus determine whether men and women were equal beings and what this meant for their respective social duties. Though the writers diverged in opinion, they believed that women's civil and civic status was the greatest political issue of the day, and

they hoped to mold public attitudes by sharing the most up-to-date scientific knowledge.

That said, these natural histories were not "hegemonic" in that doctors and intellectuals were imposing a coherent vision upon the lay public, as though one could speak of a "sovereign" professional consciousness when discussing women and gender relations (as Edward Said spoke of a "sovereign Western consciousness" when discussing Orientalism).[7] When these writers proffered their books to general readers, they were not just constructing political and social arguments but were situating themselves in the scientific and literary community, hoping to accrue status or "cultural capital" (to borrow Pierre Bourdieu's sociological term).[8] Surely they hoped to sell books, but they also wished to distinguish themselves in the medical marketplace and attract patrons and patients.

To achieve this goal, the authors crafted a writing style that differed from the clinical approach found in the standard textbooks on women's health. With these "natural histories," they sought to engage and even entertain their readers, serving them a dish of science seasoned with political meditations and literary verve. In so doing, they offered less a shared worldview than a particular take on revolutionary social conditions. Sometimes, the writers combined agenda and ambition in ways that belied the political points they hoped to establish. But herein lays an essential quality of the natural history of women. It established a new dialogue between medical texts and readers, one that drew upon variegated styles and conventions, and one that created books that were open-ended and fragmented in form and content.

Above all, doctors and intellectuals used the natural history of women to understand human nature and personal identity in the postrevolutionary moment. They wished to determine, in the words of philosopher Charles Taylor, "where they [stood] on questions of what is good, or worthwhile, or admirable, or of value."[9] Seen in this light, these writers sought a genuine or authentic self and what it meant to be a man or a woman in the postrevolutionary age—and then live out these "natural" roles in everyday life. These books explained, from a relentlessly male point of view, what women supposedly were and how they should behave in a changing society. It offered readers an objective measure to set the world a bit straighter in a time when the path forward seemed dangerous and unclear.

To understand this genre, one must start with the writers themselves, for their biographies help illuminate their agendas. The most prominent of them was Pierre Cabanis (1757–1808), who was a leading physician and Idéologue philosopher (fig. 3.1), and who has already appeared above in our discussion of medical reform in the late 1790s. In the waning years of the Old Regime, he joined Madame Helvétius's salon circle and befriended the philosopher and mathematician Condorcet; from these interactions, in part, he forged his materialist philosophy and outlook on social improvement. Under the Directorial republic (1795–1799), he served as a legislative deputy and later conspired with Napoleon Bonaparte to overthrow the republic. For his support, Napoleon awarded him a senatorial post, but he was later purged because of his liberal sympathies.[10]

The other writers lacked Cabanis's intellectual status. Jean-François de Saint-Lambert (1716–1803) was a well-known poet and man of letters, a figure whose life and career

spanned both the Enlightenment and the French Revolution itself. Though contemporaries praised him for his lyrical poem *Les Saisons* (1769), historians chiefly remember him today for his liaisons with mathematician Émilie du Châtelet (1706–1749), who died giving birth to his illegitimate child, and Sophie d'Houdetot (1730–1813), who in turn inspired Rousseau's character Julie in *La Nouvelle Héloïse* (1761).[11] By the time Saint-Lambert published his long natural-philosophical work on women, he was already in his late seventies, and contemporaries perhaps found him more of a curiosity than a serious thinker. That said, the timing of his book cannot be ignored, for its ideas grappled with postrevolutionary concerns.

By contrast, Dr. Jacques-Louis Moreau de la Sarthe (1771–1826) belonged squarely to the revolutionary generation (fig. 3.2). He was born in Montfort and, as a young adult, moved to Paris in 1791. He trained first as a surgeon, later receiving a post as librarian at the medical faculty library in 1795. Afterward, he earned his medical degree and taught medical history. Friend to Cabanis and Cuvier, Moreau de la Sarthe helped edit the medical series for the *Encyclopédie méthodique* (taking over for the late Vicq d'Azyr), and he directed a massive revision of Johann Kaspar Lavater's multivolume work on physiognomy (see chapter 4). In addition, he wrote about various medical innovations, psychiatric treatment, and vaccination.[12]

PIERRE-JEAN-GEORGES CABANIS
Célèbre Médecin et Philosophe
Membre de l'Institut, Sénateur et Comte de l'Empire (1757-1808)
Reproduction d'un portrait provenant du cabinet de M. Roche, imprimeur à Brive
(Imprimerie Lemercier, Paris. Albert, lithographe).

Fig. 3.1. Vermeil de Conchard, *Trois études sur Cabanis d'après de documents inédits* (Paris: Petit, 1914). Image no. 08946. Bibliothèque Interuniversitaire de Santé, Paris. Pierre Cabanis is here described as both a physician and a philosopher. His bioanthropological ideas gave medicine enormous influence in postrevolutionary intellectual circles.

Like Moreau de la Sarthe, Julien-Joseph Virey (1775–1846) was a provincial who came

to Paris during the revolution to make his career (fig. 3.3). Trained in pharmacy, he later took a medical degree and affiliated himself with the Société des Observateurs de l'Homme. He wrote prolifically on natural history, physiology, and *materia medica*, and he also helped edit the *Nouveau dictionnaire d'histoire naturelle* and G.-L. Leclerc de Buffon's monumental *Histoire naturelle*. Later, he was elected a national deputy from his native Haute-Marne and distinguished himself by his liberal sympathies—an outlook that, under the Restoration, might have cost him a faculty appointment.[13]

The remaining writers are more obscure. Dr. Gabriel Jouard (17[??]–18[??]) published some literary criticism and submitted a medical thesis on the natural history of women. He wrote two other books—one on contagion and the other on Montpellier medical doctrine—but beyond this, historians know little about his life and professional practice. Finally, Louis-Victor Bénech (1787–1855[?]) was born in Saint-Cirq in Lot and trained in Paris. Of these writers, he alone experienced the French Revolution as a child and is better situated among whom Alan Spitzer has called "the generation of 1820."[14] Beyond his medical speculations on women, Bénech wrote several short works on disease, environment, and cancer, and he seems to have incited public controversy in his native province with his unorthodox treatments for chronic disease. Not surprisingly, perhaps, he also dabbled in animal magnetism (as seen in chapter 7).

Fig. 3.2. Jacques-Louis Moreau de la Sarthe (1771–1826) (s.d.). Code: CIPA0734. Bibliothèque Interuniversitaire de Santé, Paris. A colleague of Pierre Cabanis, Moreau de la Sarthe practiced medicine and served as the chief librarian of the Paris medical school.

Several points emerge from these biographical sketches. All these writers—excepting Bénech—formed firsthand impressions of the French Revolution, and, with the medical

practitioners, benefitted from its medical-institutional reforms. Though they possessed some intellectual status, none of them—save Cabanis—was a significant player in the scientific and literary establishment. For example, Moreau de la Sarthe enjoyed Cabanis's patronage and published widely, but he never received a prestigious university post; meanwhile, Virey's Rousseauvian sympathies and liberal politics likely alienated medical colleagues and public authorities. In other contexts, figures such as François-René Chateaubriand dismissed Saint-Lambert as a relic from a bygone Rococo era,[15] whereas Jouard and Bénech remain complete unknowns. Ultimately, these male writers—again, Cabanis is the exception—were not powerful figures within the intellectual establishment; they are perhaps best characterized as average or sometimes even marginal thinkers. These men, who craved greater status and recognition in the republic of letters, self-consciously picked up the subject of women and sexuality, not merely from a disciplinary will to power, but rather in personal ways, hoping to advance themselves as writers within the intellectual community.

The natural history of women drew upon a larger corpus of medical writings and practice. One impetus came from a growing medical literature on what contemporaries called "les maladies des femmes": not just obstetrics and gynecology proper, but the range of diseases that afflicted women.[16] These medical authors expanded upon the old Aristotelian-Galenic tradition—seen in books such as Jean Liébault's *Trois livres des maladies des femmes* (1649) and Jean Varandée's *Traité des maladies des femmes* (1666)—and treated women as a distinct group, in pathological terms, "because of the constitution which is proper to them."[17] Following Jean Astruc's pioneering works, these practitioners argued that women suffered from special diseases "depending upon particular parts unique to women": menstruation, procreation, gestation, childbirth, and nursing.[18] This understanding informed, most notably, Nicolas Chambon de Montaux's major trilogy on female pathology: *Des Maladies des femmes* (1784), *Des Maladies de la grossesse* (1785), and *Des Maladies des filles* (1785). In 1794, when revolutionaries transformed the medical faculties and hospitals, reformers placed these ideas in the new curriculum, and they appeared in textbooks such as François Vigarous's *Cours élémentaire des maladies des femmes* (1801) and Joseph Capuren's *Traité des maladies des femmes* (1812).[19]

Beyond these writings on female pathology, the natural history of women drew upon two other traditions: the "science of man" and "natural history," both of whose conventions shaped the genre. This first tradition—the science of man—meant complex things for contemporaries. It involved, first and foremost, the study of the individual mind and body, as inherited from René Descartes's dualist approach in his *L'Homme* (composed in the 1630s and published in 1664) and his *Passions de l'âme* (1664), and was expounded by enlightened writers such as John Locke and David Hume, alongside many others, as the science of human nature itself. By applying "experience and observation"—to use Hume's terminology—philosophers and scientists could understand the moral realms of the mind, grounding it in an empirical and analytic study of the individual human self.[20] As seen in chapter 1, the science of man constituted a critical part of the Enlightenment's arsenal, and it attracted ambitious and philosophically minded physicians and surgeons. Through this experimental philosophy, they could explain

human consciousness and activity, both on the individual and collective levels. For these philosophers, this study was the first step toward comprehending human nature and then crafting public policies to improve human condition writ large.[21]

Fig. 3.3. Julien-Joseph Virey (19e siècle). Code: Anmpx28x3529. Bibliothèque Interuniversitaire de Santé, Paris.

Virey's work often breached the official boundaries of medical science, but his work on gender and natural history strongly engaged lay audiences.

By contrast, the second tradition—"the natural history of mankind"—also boasted its own conventions and agenda.[22] In different ways, this tradition drew upon comparative anatomy, human geography, and anthropological or racial classification schemas. This approach was launched with Carl Linnaeus's *Systema natura* (1735) and G.-L. Leclerc de Buffon's *Premier discours de la manière d'étudier et traiter l'histoire naturelle* (1749) and was institutionalized in natural history museums located in both Upsala and Paris, respectively.[23] Often, these natural histories broached the controversial links between humanity and the animal world—a key point was the comparative study of primates and non-European peoples—and promoted a more naturalized understanding of human types and diversity, sometimes with overtly colonialist and racist agendas in mind.[24] By the late eighteenth century, this research attained greater sophistication with Félix Vicq d'Azyr and Georges Cuvier and was further popularized in Virey's *Histoire naturelle du genre humain ou recherches sur les principaux fondemens physiques et moraux*, which he published in 1800–1801.

Natural history emphasized an observational and taxonomic dimension—"the faithful description of natural singularities"—that distinguished it from the analytical or philosophical style associated with the science of man.[25] It was a tradition often dominated by descriptive narration, one that combined erudite precision and natural curiosity, something akin to conventions found in the genre of eighteenth-century literature of travel and exotic places.[26] Here the book functioned as a simulacrum of direct experience, a remote vista into the wonders of the world. It also meant that natural history could speak to a more general reading public, one beyond more specialized circles, as seen with the proliferation of naturalist books and private collecting associated with curiosity cabinets (which could include a range of specimens from fossils to preserved fetuses). Even Buffon found himself popularized in books written for children.[27]

At the same time, some critics worried that this fashionable or generalist quality undermined the scientific rigor and prestige of natural history and rendered its methods and practices "poorly conceived."[28] By the end of the eighteenth century, then, practitioners tried to elevate natural history to the level of an exact observational and empirical science, one that could analyze its subject matter from "the point of view of its real utility and its application to arts, commerce, and agriculture."[29] This agenda influenced those savants who wished to apply natural history techniques to study humankind itself in all its anthropological and geographical detail. One sees these interests expressed in the new courses on the "natural history of man," which were first taught at the Muséum d'Histoire Naturelle by Bernard-Germain Lacépède, who had collaborated with the naturalist Buffon, and then later at the École Normale with his colleague Jean-Louis-Marie Daubenton, who was editing Buffon's posthumous works.[30] Nonetheless, these more literary and popular forms of natural history, so typical of enlightened tastes and styles, continued into the 1800s and marked, in indelible ways, the

"natural history of women."

Both factors, the "science of man" and the "natural history of mankind," coalesced in the writings of the *médecins–philosophes* and their project to construct a "physiological" or "anthropological" medicine to explain the mind-body problematic. As seen in chapter 1, this project originated from the coterie of Montpellier doctors, the most important of whom were François Boissier de Sauvages, Théophile de Bordeu, and Paul-Joseph Barthez. These physicians rejected older iatromechanistic models inherited from Hermann Boerhaave and Friedrich Hoffmann and instead sought to construct a more vitalistic account of physiological function.[31] This physiological approach significantly influenced postrevolutionary writings on women and healing. Doctors wanted to explain mind-body relations by identifying the discreet physical property that animated the human frame. In so doing, doctors subsumed organic properties under the rubric of physical sensibility—the organism's unique capacity to receive and respond to sensation—and posited that the nervous system determined human health and individual identity itself. Consequently, doctors tried to explain how vital properties manifested themselves across human life: age, environment, occupation, temperament, race, and—most important for present purposes—sex and sexuality.[32]

In these comprehensive bioanthropological systems, the female body acquired special status, as physicians and naturalists sought to identify all elements of sexual differentiation, particularly with regard to skeletal structure. Women became central to medical philosophy and presented a particular case study: a pathological state of exception or a "model of pathology," as François Azouvi has put it.[33] For these doctors, women incarnated the most significant danger associated with sensibility: how anarchic and pathological drives, inhering in the body, could destroy health and life itself.

The most important work was Pierre Roussel's *Système de la femme*, which he first published in 1775 to wide acclaim. Roussel argued that doctors and philosophes must consider women in their physical totality, not just as reproductive machines.[34] For him, women possessed "a radical and innate difference, which exists in all lands and all peoples," and to study them the doctor thus required a holistic approach typical of the Montpellier school.[35] He considered his work as complementing the pedagogical and moral ideas that Rousseau had advanced in his *Émile* (1762), as well as the strong anxieties about luxury, fashionable refinement, and nervous disease advanced by hygienic crusaders such as Samuel-Auguste Tissot. Roussel thus wanted to naturalize women and regenerate them by recalling them to their domestic destiny. Like other Enlightenment critics, he believed that something had gone wrong with women during the eighteenth century, and it was up to doctors and moralists to cure these pathological relations.[36] The body politic depended upon it. Following the revolutionary upheaval, with all its questions about women and gender, legislative and intellectual authorities returned to this theme with energy and determination.

Pierre Cabanis picked up these themes about women, nature, and society in his lectures at the Institut National, the crown jewel of the Directory's new educational system, and he later compiled them in his *Rapports du physique et du moral de l'homme* in 1802. In this text, which influenced much social and scientific thought in the nineteenth century,

Cabanis promised that the science of man could heal a country torn apart by revolution and war. He built upon Claude-Adrien Helvétius's materialist monism, in which sensibility and the environment shaped human experience, and superimposed upon it Condorcet's vision of perfectibility outlined in his posthumous work, *Des Progrès de l'esprit humain* (1795).[37] Cabanis treated three qualities interdependently: the physiological, the moral, and the world of ideas. Throughout, he insisted that intellectuals should never separate mind and body, as the sensory organs determined all feeling and thought.[38]

To understand human nature, physicians must study how this physical sensibility functioned in the body and determine how it affected mental and moral functions. Cabanis identified what he considered to be the most critical facets of sensibility: the sensations; the influence of age, sex, temperament, disease, regimen, and climate or geography; the formation of ideas and moral affections; the qualities of animal life such as instinct, sympathy, sleep, and delirium; mind-body relations; and education and temperament.

When Cabanis elaborated on this physical sensibility, he argued that sexuality determined humanity's physical and mental experiences and thus marked men and women as radically different beings.[39] He began with the reproductive organs. Following Louis de Lacaze and Victor de Sèze, he argued that the uterine system provided a centripetal force that governed the female being and this force extended throughout the body: the bones, the muscles, the fibers, and, especially, the brain and nervous tissue, which Cabanis characterized as soft and pulpy when contrasted to a man's. These constitutional weaknesses exposed women to powerful internal and external stimuli so that they lacked control over desires and emotions.[40]

Moreover, these physical factors determined women's character, behavior, and moral and mental aptitude. From the beginning of a woman's life, he asserted, sickness and death tormented her: "By a severe necessity, attached to the role nature assigned to them, women find themselves subjected to many accidents and inconveniences; her life is nearly always an alternating episode between well-being and suffering, and, all too often, suffering dominates."[41] Nonetheless, nature's "severe necessity" illustrated the part that women ought to play in society because biological determinants destined them for procreation, nursing, and primary education.

To fulfill this domestic vocation, then, nature had given women one set of skills, namely sentiment and devotion, but had denied them, on the mental plane, an active and fertile mind. Like Roussel, Cabanis drew upon Rousseau and claimed that women were attracted to objects and sentiments that underscored their innate maternal instincts and skills: qualities, he lamented, that men themselves often lacked. Women's affective qualities prohibited them from applying their minds or concentrating their intellects, particularly when they tried to grasp abstract ideas associated with science and mathematics. Rejecting the claims of female writers such as Isabelle de Charrière and Julie Bondeli, who had refused to equate physicality with intellectual aptitude, Cabanis asserted, in a contemptuous tone, that even "educated women really know nothing deep down" [*les femmes savantes ne savent rien au fond*].[42]

When Cabanis cataloged these examples, he rebuked recent philosophers and

legislators who claimed that men and women were equal in their mental and moral aptitudes and who concluded therefore that society should grant women the same rights and opportunities as men (this group included Cabanis's late friend, Condorcet). No belief, Cabanis said, could be more pernicious to the commonwealth. For him, women were happiest when they were making men happy, and he dismissed radical thinkers who claimed to represent women's best interests. In hyperbolic style, Cabanis wondered whether feminists truly believed that women could pick up arms to defend their country or mount the public tribunal to debate "the interests of a nation."[43] Cabanis himself rejected such a proposition and insisted that he founded his opinions in medical fact. To believe otherwise, he concluded, would do violence to women, who should live in mutual dependency with men. As he saw it, "It is necessary that men are strong, audacious, and enterprising, and that women are weak, timid, and crafty. Such is the rule of nature."[44]

Two points emerge in how Cabanis analyzed sexual and gender relations. First, Cabanis believed that medicine offered profound insights into the moral nature of both men and women. It provided not just a vision of social and natural reality, but also a means to ground moral-ethical behavior and to make individuals into responsible and dutiful moral agents. Medicine thus allowed people to understand their inner selves and personal identity and thus become more authentic and useful individuals. Through this science, contemporaries could reconcile personal liberties and social duties with the natural order and thus make society a more happy and harmonious place.

At the same time, Cabanis saw himself as moderate, if not liberal or progressive minded, in how he understood women and sexuality. At no point would he have characterized himself as reactionary, obscurantist, or old-fashioned. Throughout his work, he believed that his ideas steered a middle ground between two extremes: on the one hand, reactionary or traditionalist attitudes towards womanhood (that is, the Christian view of woman as either saint or harlot); and, on the other, more revolutionary and subversive views about women's emancipation and autonomy (which he found unnatural and untenable). In response, Cabanis believed that the medical science of man provided physicians, moralists, and legislators the means to discover the just balance and put it into practice. Other doctors and philosophes shared his faith in the mediating power of scientific medicine and developed it further in their works.

The first writer to expand upon Cabanis's agenda was Saint-Lambert in his *Analyse de l'homme et de la femme*, a work he first published as part of his two-volume *Oeuvres philosophiques* (1800–1801). In this grand analysis, the old poet purported to study human nature and then apply his insights to control and contain the passions: an essential task, he thought, given the violent emotions unleashed by the French Revolution. Like the urbane philosophes whose company he had kept during the Old Regime, Saint-Lambert identified with Epicurean principles, and he called upon legislators and moralists to take people as they "really were" and not as rational abstractions that leaders needed to change through legislative force or violence.[45] As with Cabanis, revolutionary memories haunted Saint-Lambert's book.

Saint-Lambert divided his philosophic work into four sections. In the first, he treated

men and women separately, describing the inner nature of each. He outlined specific pedagogical approaches that he hoped would change parental attitudes and give them good skills for molding their children's beliefs and behavior. Next, Saint-Lambert explained how readers could control their passions and appetites, thereby sustaining the social peace. Lastly, he summarized historical progress in law, institutions, and natural philosophy in a way that evoked Jean Le Rond d'Alembert's celebrated "Discours préliminaire" to Diderot's and d'Alembert's *Encyclopédie* (1751).

Throughout, Saint-Lambert drew upon different genres and expository techniques, all which gave his book a digressive style—a series of Lockean associations that evoked Lawrence Sterne's and Denis Diderot's literary experiments—and which, as will be seen, characterized many medical writings in the post revolutionary decades. When Saint-Lambert analyzed the male character, he used an analytic framework derived from René Descartes and David Hume, focusing upon human nature, the passions, and moral ideas. However, when he turned to women, he changed registers and declared that this "sweet work" required a more creative form. He tried to achieve this effect by casting the section as a dialogue between two noted figures from the age of Louis XIV: François Bernier (1620–1688), the Montpellier physician, voyager, and Epicurean disciple of Pierre Gassendi; and Anne "Ninon" de l'Enclos (1620–1705), a famous courtesan and freethinker, who was one of the great salonières of the period and mistress to François de La Rochefoucauld and Christian Huygens, among others. Throughout the dialogues, however, he made the male philosopher do the heavy thinking. It is this masculine persona, and not the *femme d'esprit*, who gets in the last word about women.

Saint-Lambert's dialogues happen in the Tuileries palace and Ninon's home and garden (he cast one as an epistolary exchange), and the subject matter ranged from women's character to her passions and virtues. Bernier begins by asking Ninon why women seemed in "a condition less happy than our own," despite their "physical, intellectual, and moral qualities," which liken them to a beautiful work of art. When responding to his gallantry, Ninon rebukes him. She declares that the more she thinks about women, the more their condition revolts her; she refuses to accept the existential fate that nature and society have prepared for her. More pointedly, she doubts whether men could ever divest themselves of their prejudices and acknowledge that they, women, also possessed reason and intelligence [*esprit*]. For her, men had failed to study women fairly and systematically.[46]

In some ways, Bernier invokes Rousseau's claim in *Émile*—"in everything that doesn't belong to sexuality, woman is a man"—and he declares that men and women possessed on the surface the same aptitude: "the principles of mind [*morale*] belong equally to one and the other sex."[47] Nonetheless, when observers studied women, they must begin with physical and not moral qualities, because the former determined women's experiences. One must acknowledge these biological realities before contemplating inequalities between the sexes. As he put it, women "haven't the force to examine, to meditate, to reason."[48]

Saint-Lambert continued this line of analysis. As Bernier describes it, women's sensible nature denied them "a superior spirit."[49] They lived only in the present and their feelings were only reactive. They resembled more a mirror than a living being, reflecting passively

rather than representing anything on their own. As a result, he said, women lived in a world of illusion, surrendering themselves to imaginative desires. Bernier asserts that women often abandon everything to satiate their passions, above all that of love, and in the process become capricious, unjust, and cruel. Love seasons life, he declares, but deep down people needed friendship. Unfortunately, women cannot endure this sincerity and instead used tactics such as flattery and coquetry—tactics, Bernier found, which were both the pride and shame of Gallic culture.

Consequently, when Bernier asks Ninon whether women could ever unite against men, she responds that such a movement would be impossible: women, she asserts, lack solidarity with one another because they see each other as rivals for male love and attention. Like Mary Wollstonecraft—who had complained that women acquired "manners before morals"—Saint-Lambert suggested that women relied upon other people's opinions when they formed their self-worth, and this slavish attention to taste hampered their genuine nature: that inner realm where they could fortify their moral selves and emancipate themselves.[50] Instead, as in Montesquieu's *Lettres persanes*, women engage in seraglio politics, pleasing despotic men for personal gain and aggrandizement.[51] Patriarchy stripped women of their inner nature and moral destiny.

Nonetheless, morals and customs degraded women more than any intrinsic "natural" weaknesses. Ninon declared that women understood from an early age that they are at men's mercy and subject to their force and violence: first from their fathers, then from their husbands. This reality governed their outlook and behavior. Women learned to alleviate their "slavery" by using feeling against their "tyrants." They acted passively and indirectly so they could endure their daily subjugation, and they treated men with seductive charm because their oppressors never tolerated them being direct and assertive. Above all, women cultivated pity in men with their tears and emotional displays. In Ninon's words: "it's by exciting them in you that we escape a part of your injustices."[52]

Still, Saint-Lambert said that women could discover moral virtue. Though weak in their minds and bodies, they possessed canny qualities. Women knew more about men than men knew about themselves—a quality, Bernier adds, that all slaves developed with their masters. Not surprisingly, women loved children more than men did and without this maternal instinct, the family unit failed to exist. This virtue pointed to a more genuine morality. Since women pitied more than men, they considered not just children, but all people who were weaker and dispossessed, such as the sick and the poor, and thus demonstrated a higher ethical calling.[53] With their love and pity, women moderated male avarice and violence and taught them empathy. They became the carriers of a secularized agape: love for one's neighbor.

Saint-Lambert's conventionality notwithstanding, he ended his book with a degree of self-criticism. In the final dialogue, Bernier composed a long letter to Ninon in which he summarizes what he has learned about the female condition. He confesses freely: he's long blamed women's weaknesses on their physical nature, but now he recognizes that men and men alone had created their "sad" state. It is not Ninon's reasoning that convinces Bernier, but her desultory attitude, so pessimistic about women's fate. Social convention and hypocrisy had violated a fundamental reality between men and women.

Gabriel Jouard approached these questions differently in his *Nouvel essai sur la femme*

(1804). For him, women's health became a personal crusade. The year before, in 1803, he had submitted a thesis to the Paris medical faculty titled *Essai sur quelques points de l'histoire naturelle de la femme*,[54] and earlier he had published a literary critique of the poet and academician named Gabriel Legouvé (1764–1812), whose elegiac *Mérite des femmes* (1801) had been well received and was translated into Italian and Catalan. One point characterized Jouard's writings: men subjugated their counterparts to a "virile despotism" and themselves caused all the faults they blamed on women.[55]

According to Jouard, men scorned and slandered women and then judged them unfairly, but he hoped to change public opinion by establishing the facts of sex and morality. These sentiments aside, Jouard imitated his medical colleagues like Pierre Roussel and insisted that eighteenth-century morals and manners had degraded and sickened women. However, by carefully studying them, authorities could discover women's true nature and make them happier and more useful to society. And although he said he wanted to improve the female condition, he still reserved this task for men alone.

Observers must first confront sexual difference. In the animal kingdom, Jouard insisted, vast differences existed between males and females and these differences extended into the human world as well. In biological terms, these markings appeared at the earliest stages of fetal development: sexuality, for Jouard, was an impulsive force that framed human experience. In his words: "Thus in every age, from birth to advanced old age, we find again in women the general characters that distinguish them from men of the same age."[56] Sexual dimorphism clarified one's biological destiny and one's social duties "for the compliment and reproduction of the species."[57]

Given this universal nature, Jouard rejected travel writers who reported that women in non-European cultures could assume more dominant, if not matriarchal, social roles. For him, nothing could be farther from reality. Physical factors, he insisted, limited what women could think and what they could do. They had smaller brains and inconstant nerves, and the uterine system shaped the entire animal economy. Even their skeletons reflected their procreative destiny. Men and women, he said, seemed so different that doctors and naturalists should classify them as separate species.[58] Jouard criticized "an author who is very modern and even more famous"—likely Helvétius or Condorcet—who had "refused to see in these organs any species of influence, as much moral as physical, on organization and the manner of being of the individual who is provided with it."[59]

That said, men had exploited women's physical dependencies. By abusing and enslaving them, society annihilated their moral autonomy. He wrote:

> from the inferiority of a woman's structure and the inferiority of her organs … arises the most significant of physical differences that exist between the two individuals of the human species: I want to speak of the extreme inequality in their force, an inequality on the effect of which are established all respective relations in which the two sexes find themselves: whether in the natural state, or whether in the social state, and equality that is strong in favor of men, who have so often used and abused it.[60]

"Inequality" and "difference": strange words to keep invoking in a new democratic age. Nonetheless, Jouard believed that he was rejecting traditional prejudices against women, even dismissing medical colleagues like Pierre Roussel who had characterized women as children or castrated males. He refused to characterize women as "imperfect men": anatomical lack, in his view, failed to define them, and it was morally wrong to pigeonhole women as such terms. Instead, Jouard struggled with how political and scientific upheavals had transformed how people understood men and women and what roles they were supposed to play in this new world. For by knowing what one is one can become what one should be. Like other contemporaries, he hoped that medical science could help French citizens imagine a more natural society, one stripped of the Old Regime's decadent artifices or the Revolution's violent passions. At the same time, he worried about what biological determinism heralded for moral liberty and individual responsibility. He did not think that he was substituting Christian servitude with a biological yoke. Rather, he thought he was liberating women and letting them be what they were. He wanted to recover for women an authentic self.

The most influential books in this new genre were written by Jacques-Louis Moreau de la Sarthe and Julien-Joseph Virey. Both doctors were avid naturalists and popularizers who left behind them a large but checkered bibliographic corpus. Though neither was on par with the cutting-edge clinicians at the Paris hospitals or the naturalists at the Muséum National d'Histoire Naturelle, both doctors moved within this setting and published enough to attain a degree of status and respectability. Their books weighed heavily in the world of ideas—Moreau de la Sarthe's works found their way into the university curriculum on obstetrics and gynecology[61]—even if one senses that sophisticated doctors found their writings too facile, addressed more to fashionable readers than to respectable men of science.

Moreau de la Sarthe's *Histoire naturelle de la femme* was a two-volume opus filled with engravings, scientific tables and figures, and literary digressions. Following the example that Voltaire had established when he popularized the Newtonian system, Moreau de la Sarthe said that the writer must soften the "thorns" of science with the "flowers" of style.[62] He wanted his book to be "agreeable" in form and "useful" in content, so that men of letters, fashionable elites, and, above all, women might read his work "for their happiness and their preservation."[63] He repeatedly juxtaposed the informative and the fantastic, the technical and the pleasing, achieving, in the words of Sergio Moravia, a "notable echo."[64]

Moreau de la Sarthe organized his book around four primary topics. Foremost, he explained women's physiological nature by drawing upon the gamut of postrevolutionary science and medicine, whether new works on respiration and digestion, Alessandro Volta's electrical experiments, embryological data on development and regeneration, comparative anatomy and taxonomy, and clinical advances in pathology and hygiene. From here, he analyzed female form and beauty, and he distilled the aesthetic writings of William Hogarth, J.-J. Winckelmann, and Edmund Burke. Next, he applied the model that G.-L. de Buffon had established in his "Discours sur la nature des oiseaux," so to distinguish "the sum and total quantity of differences, qualities, and

attributes that distinguish women [*le sexe*]."[65] Finally, he cataloged anthropological and ethnographic data—particularly racial classifications—and treated "the principle varieties that present the mind and body of a woman considered in different circumstances of age, climate, and civilization."[66] Readers should take women for what they were: "the essential part of the species because they contribute more to reproduction."[67]

Like Roussel and Jouard, Moreau de la Sarthe argued that sexuality transcended procreation. Reproduction alone, he declared, failed to define a woman. Instead, sexuality saturated the whole body, shaping them more than education and environment. In his words, "woman is not only a woman by a system of organs, or by her exterior forms which seduce us." Rather, "she is woman … in all her manners of existence, in her moral affections as in her physical system, in her joys as well as in her suffering." He concluded, "all the parts, all the points of her being reveal her sex and present a series of oppositions and contrasts to all the corresponding parts of men."[68]

Moreau de la Sarthe multiplied his examples. He drew upon recent works in which anatomical practitioners created either exact or idealized models of the female skeleton. In particular, he referenced the famous texts by Albinus and Samuel Thomas von Soemmering, among others, who had insisted that the female pelvis demonstrated a woman's primary childbearing role. Moreau de la Sarthe even provided his own illustration on this point (fig. 3.4).[69] Next, he turned to embryological research and expounded upon Spallanzani's work on animal generation, which had built upon Albrecht von Haller's and Charles Bonnet's preformation theories, and which seemed to confirm ovist preexistence: the idea that the embryo preexisted in the female ovaries and subsequent generation was the unfolding of this original germ structure. From this evidence, Moreau de la Sarthe speculated that sexual difference existed in embryonic form—if not a priori—in the uterine system, perhaps even before fertilization, and he portrayed ambiguous sexuality—hermaphroditism—as a monstrosity beyond natural comprehension (fig. 3.5).[70]

In other parts of his book, Moreau de la Sarthe argued that women suffered from hypersensitive nerves and a weak muscular apparatus, both which meant that they succumbed easily to exaggerated feeling. These determinants extended even to absorption and nutrition and predisposed women to plethora and discharge (as seen with menstruation). Given these observations, Moreau de la Sarthe echoed Jouard: women were less imperfect men than a different species, something singular in the animal kingdom.

These physical determinants shaped moral qualities associated with mind, character, and behavior. Moreau de la Sarthe claimed that women underwent no less than twelve distinct life stages, ranging from birth to postmenopause, each of which altered female experiences. Material factors thus determined all personal experience. Muscular weakness and sensibility made them mentally inconsistent, unable to reason correctly, though their nervous energy gave them powerful motor skills and social graces. However, this hypersensibility rendered women prone to emotional outbursts and nervous diseases, notably the vapors and syncope (as seen with coma or trancelike states).

Moreau de la Sarthe linked physicality and character most strongly when discussing

female beauty. In this discussion, he drew upon Burke's aesthetic theory of the beautiful and the sublime—a political contradiction, given Moreau de la Sarthe's republican sympathies—and argued that female beauty inspired neither fear nor respect but somewhat weaker feelings associated with "tender predilection, desire, [and] love."[71] Unlike the male sublime, which evoked power and horror, femininity inspired images of delicacy, refinement, and gentle beauty. For Moreau de la Sarthe, these aesthetic qualities substantiated a woman's inferior mental and expressive qualities.

These characteristics, he went on to claim, suggested proper duties for women. In his mind, the uterine temperament predominated in the female body and thus marked reproductive destiny. Further, ovist preexistence suggested that women possessed all possible embryos in their ovaries, which meant that the fetus constituted a part of the female body, like a nose or an ear, an appendage for which she alone was responsible. At the same time, women's sensible and sentimental nature prepared her for domestic duties, making her respond lovingly to her children's needs. That said, Moreau de la Sarthe railed against what he considered to be reactionary and bigoted Christian attitudes toward sex, above all celibacy and ascetic denial. Both habits, he felt, were unhealthy and incited sexual pathologies such as nymphomania, "lesbian habits," and "English onanism."[72] Instead, he promoted a moderate sexual ethic as seen in Diderot's "Supplément au voyage de Bougainville" and his *La Religieuse* (which was published posthumously in 1796).

In the end, to behave correctly, women should maintain rigorous moral and physical hygiene. Following Thomas's *Essai sur la femme*, Moreau de la Sarthe said that women shared the same dangers as men, but then nature inflicted upon them even more deadly disorders against which they must keep guard. Medical science could overcome these challenges by teaching women hygienic precepts and giving them the peace of mind that only good health provides. Hygiene, he promised,

> can, at the least, weaken [these pathological dangers] by fortunate applications; signal pitfalls; give useful advice; prevent abuses; enlighten and improve daily habits [*emploi de vie*] which women are so prone to abuse; guide them in the midst of peril; support them in the most fearsome crises and in the stormiest transitions when exercising the most delicate functions; and assuring their existence in the midst of the dangers that threaten them, conserving their health as well as their charms, and preparing for them an old age without infirmities and a death without agony.[73]

In his *De la femme*, Julien-Joseph Virey recapitulated many themes established by Cabanis, Jouard, and Moreau de la Sarthe, but he affected a literary flair that was more in the tradition of Saint-Lambert's writings. Virey concerned himself with perceived moral degeneracy and sexual perversion among women, but he also moved beyond the monist materialism associated with Cabanis's Idéologue circle. Instead, he promoted a sentimental worldview, one that evoked Rousseau's and Bernardin de St. Pierre's "natural man" and primitive virtue. He also had direct medical influences. Throughout, he mimicked the great Enlightenment health crusader Dr. Samuel-Auguste Tissot, who had

styled himself, in good Rousseauvian fashion, as the people's "friend" and had launched passionate jeremiads against the perceived debauchery of Enlightenment society.[74] Like Tissot, Virey expressed a particular animus toward upper-class elites and fashionable society, particularly what he considered to be well-heeled women. One issue consumed Virey's thought: class and sexual resentment. It might even be said that he took class antagonism and framed it in explicitly gendered terms.

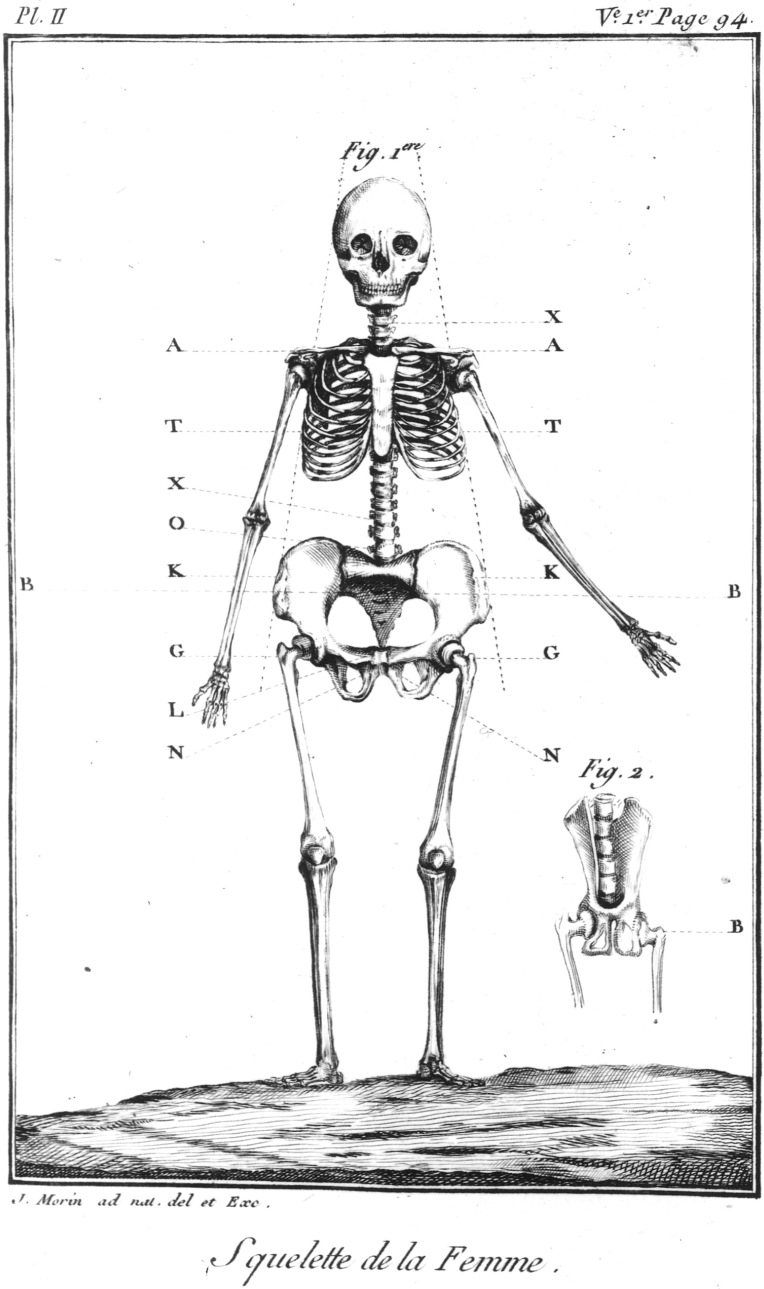


FIG. 3.4. Plate 2 from vol. 1 of Jacques-Louis Moreau de la Sarthe, *Histoire naturelle de la femme*, 3 vols. in 2 (Paris, 1803). National Library of Medicine, Bethesda. Moreau's image accentuated what he thought was the pyramidal structure of a woman's skeletal structure, emphasizing its procreative functions. He compares human anatomy with that of a simian pelvis.

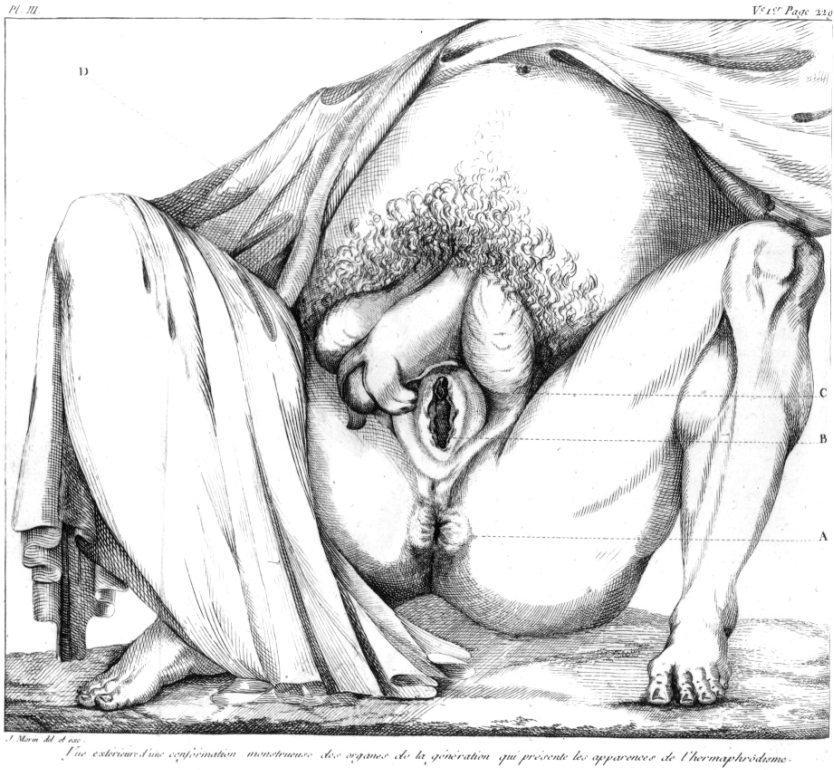


FIG. 3.5. Plate 3 from vol. 1 of Moreau de la Sarthe, *Histoire naturelle de la femme.* The caption reads that it depicts the "exterior perspective on the monstrous conformation of the organs of generation." He portrayed ambiguous sexuality to shock and titillate his readers.

According to Virey, the learned observer must combine natural history, comparative anatomy, and physiological science in order to understand women. Only through this means, he insisted, could one grasp the physical and moral functions that shaped female experience. In so doing, he returned to Rousseau by distinguishing between nature and artifice, arguing that civilization altered humanity's natural body and mind. Consequently, humankind's "diverse states of civilization and education, its incredibly variegated genres of life, in all situations and all political conditions, among all the lands of the globe, glorify or deplete, alter or deform its original type." However, he put women at the center of this evolutionary drama, making them the primary motor behind generation, degeneration, and regeneration. Accordingly, woman—"that being so delicate, that flower of living nature"—experienced these physical alterations more profoundly than their male counterparts, marking them for disease and disorder.[75]

To make this point, Virey drew upon a wide range of anthropological and travel literature, much as he had done in his two-volume *Histoire naturelle du genre humain* (1800–1801). He filled these chapters with prurient ethnographic details about women

across the globe and divided them between what he called whites, blacks, Mongolians, Malaysians, and Amerindians. He focused upon sexual custom and practice—the only other contemporary to fixate so much upon the sex habits of other societies was likely the Marquis de Sade—and he characterized non-Western sexuality as alien and barbarous. Like Roussel, Virey believed that menstruation marked civilized overrefinement, in which early onset revealed a deep-seated moral pathology; elsewhere, he claimed that matriarchy (or any other form of female authority) suggested either capricious barbarism or anarchy—that is, any society in which people failed to achieve a balance between nature and civilization.

All this detail coalesced in an angry critique of contemporary gender relations and political ideas about sexual emancipation. From the onset, Virey railed against those thinkers he saw to be the deluded "partisans of equality between the two sexes [*partisans de l'égalité des deux sexes*]."[76] In other writings, he had described human beings as split, in almost Manichean fashion, between two "poles" of existence—the intellectual and the genital—and he said that individuals must struggle throughout their lives to balance these powerful internal impulses.[77] Given these conditions, he characterized a woman as "an extreme being," one consumed by powerful biological drives and appetites. In addition, sensibility overcharged the female brain and nervous system, which overwhelmed the muscular apparatus and drove her spongy tissue to hysterical display. In this hapless state, women "nearly always" resembled dependent children.[78]

Though women were extreme and volatile, nature made them the source of all life, and that point alone warranted serious consideration. Like Moreau de la Sarthe, Virey followed Bonnet and Spallanzani and posited that women were the depositories of all possible embryonic germs, rendering her "the essential stem of our species" and the "soul of reproduction."[79] However, if she possessed these embryonic germs, making procreation the principle of her life, she lacked one key ingredient: the seminal fluid whose spirituous qualities animated the germ and caused it to develop and grow. In Virey's view, this animating substance gave men their virile minds and bodies, and its spirituous qualities infused all levels of male activity. However, since women lacked semen, they felt aimless and despondent; Virey even speculated that women remained emotionally unfulfilled and sexually insatiable because they were unable to ejaculate like men during orgasm.

Beyond these sexual phobias, Virey weighed upon other social anxieties, as well. In his mind, women's physical and moral degradation signaled a deeper rot in French society; for him, this strain of moral vice had caused the Old Regime to collapse in revolutionary violence and anarchy. Medical anthropology and gender trouble combined in a sweeping history of French society. Accordingly, Virey blamed it all on aristocratic and bourgeois women, as they lived frivolous lives that corrupted men and created cruelly ambitious mothers. These factors embittered daughters and rendered them spiteful. Meanwhile, at home, domestic servants waited upon them hand and foot, instilling in them capricious and sadistic tastes. Then young women rode off to enjoy the nightlife, attending parties and balls, where endless pleasures battered their fragile nerves. When they combined these activities with other ruinous habits—coffees, teas, sweets, spirits, corsets, novels—young women fell victim to nervous diseases.[80]

This inappropriate lifestyle, he alleged, had spread throughout society and contaminated the male ruling order. And as these men succumbed, women usurped male power and inverted the natural order. This process had corrupted the Old Regime inside out. According to Virey, women had long exercised undue influence in French society, dominating courtly life and culture, the Salic law notwithstanding. However, the situation worsened when Louis XIV died, and high society rejected the old king's baroque piety. In Virey's estimation, under the Regency and Louis XV, the upper classes abandoned themselves to debauchery—above all fashionable women, who profited from this dissipated state and left their sacred maternal duties. Following the example of Louis XV's mistress, Madame de Pompadour, women got their hands into every shady deed, ranging from Jansenist controversies to fiscal bankruptcy. The nation enervated itself, abandoned patriotic sentiment, and became "indifferent to everything."[81]

To cure this perceived state of affairs, Virey insisted that legal and moral authorities must restore male power over women. He was pleased that the revolutionaries had taken initial steps, especially with the Civil Code, which had denied women active citizenship, but legislators, he insisted, needed to do more.[82] In his words, "Women, not being able to subsist themselves alone, become, by their weaknesses and graces and functions to which their sexuality destines them, the first connection to civil life"—and so civil law and custom must guarantee that women stabilized the social order.[83]

Virey returned to his greatest theme: love and companionate marriage. This theme preoccupied many social thinkers and literary men in the postrevolutionary age: Antoine-Louis-Charles Destutt de Tracy, Étienne Pivert de Senancour, Stendhal, Henri de Saint-Simon, Charles Fourier, Honoré de Balzac, and Jules Michelet. Each of them wrote extensively and even lyrically upon this subject, exploring how men and women might reconcile themselves in mutual love and respect and thus regenerate the family and society.[84]

Love also concerned medical practitioners. In 1819, Dr. Louis-Victor Bénech observed in his *Considérations sur la femme* that love bonded the two sexes together, calmed their mutual anxieties, fulfilled their existence, and helped create the human community. In one eroticized passage, Bénech insisted that the sentiment was always strongest among women, whose bodies—their "entire economy"—seemed constructed around it, as their charm and beauty enticed men to reproduce the species. At the same time, female modesty counterbalanced male sexual desire and forced them to control and domesticate their passions, almost sublimating libidinous instincts into disinterested love: first in the family unit and later in society itself.[85]

Virey echoed Bénech, though he seemed less gallant. Through the power of love, he said, the Supreme Being had breathed boundless invention into his creation and gave men and women the affective bond that held society together. Love generated life and perpetuated it: "it's the force, the principle of our existence, as it is the source of all reproduction."[86] "To love," he declared, "is to live for the species."[87] He went on to say that women bore a central role in this process because they alone carried the embryonic germs that made the human species: past, present, future. In a biological sense, humanity had evolved to a point which men and women could feel more deeply than any other being in nature. This biological progress marked women more strongly than men and

made them experience love to the core of their being.

Despite these evolutionary adaptations, love tormented women and made them emotionally extreme. Hence, they sought marriage, an arrangement that alleviated their emotional agony. At the same time, Virey also expounded a "free love" argument and claimed that men and women should only marry whom they pleased. When they could choose their own "sweet subjection" [*douce sujétion*], they loved their partners more constantly and happily. Women could then embrace the "modest servitude" that anchored their health and well-being. Above all, he said, men and women loved each other best when men were manly and women more feminine, all of which gave each other a "certain harmony of corresponding inequalities." In this state, "Because each sex, deploying its virtues and its vices, but in a different quality, there is absolutely no exact comparison to make in this regard between man and woman."[88]

In such passages, Virey outlined his view of a more "natural" sexuality between men and women. Like the republican and Idéologue Moreau de la Sarthe, he denounced Christian morality, above all celibacy and abstinence, which, in his view, debased instincts and desires. Rather than unrealistic self-control, individuals needed modesty, a sentiment that developed in the tender love felt between men and women. This quality alone could mend the social fabric and transcend political violence and confusion—particularly when individuals and families lurched from one political extreme to the other. Similar ideas preoccupied writers like Honoré de Balzac, but Virey abjured wit or satire. For him, like the other medical writers encountered in this chapter, gender relations constituted a matter of grim importance and seriousness.

These books on the natural history of women contributed significantly to the emerging world of medical subcultures and literary genres in the postrevolutionary years. Like the Marquis de Sade, writers such as Jouard, Moreau de la Sarthe, and Virey used medical ideas and language to focus on issues about human nature, social change, bodily experience, and sexual and domestic relations. Given this agenda, "the natural history of women" lacked the therapeutic or practical elements associated with specialized books on the diseases of women. Instead, these books engaged in a philosophical and speculative analysis that sought to uncover women's so-called true nature and what society should do with it. Three points seem crucial.

Foremost, the authors wanted to contribute to social and political thought by studying human nature and by suggesting how society could better organize human affairs. With these books, these doctors and moralists intervened in public discourses about changing gender roles: the social and public role of women, especially their rights and duties, as well as programs of public education. There were personal stakes in each of these questions—which constituted, for such writers, nagging social and political concerns.

At the same time, these doctors and moralists pushed individual and professional agendas, not just ideological or partisan attachments. They exploited gender anxieties to inject themselves into public consciousness and situate themselves in the broader intellectual scene. In their eyes, their books could accrue cultural capital by establishing their bona fides as both doctors and men of letters. These medical practitioners hawked

their theories of gender roles and domestic bliss in the medical marketplace, hoping to attract patrons and patients in fashionable society. Here, they appealed directly to women (as with the case of Moreau de la Sarthe) or to their husbands and fathers. This effort was not unusual. As chapter 5 will show, a similar trend appeared with doctors who wrote on sexual hygiene. Many of them hoped to make a literary name for themselves, thereby enhancing their professional status with readers.

In this regard, style and form became intrinsic parts of these texts. The books were fragmented, digressive, and filled with literary pretense. These authors blended medicine, physiology, embryology, natural history, and historical narrative in striking and unstable ways. Unlike the objective clinical style found in pathology and comparative anatomy, doctors created imaginative and nonlinear books that addressed different kinds of constituencies. They wanted to entertain their readers, perhaps evoking wonder in the old naturalist tradition.[89] The book served as a substitution, a simulacrum for the naturalist collection, exchanging the printed page for direct experience.

Most importantly, the natural history of women promised readers how to uncover people's true nature, empowering them to live more authentic lives as men and women. And medicine, these writers preached, facilitated this self-discovery. Medical ideas allowed people to understand momentous sociopolitical changes and control or contain them. According to them, progressive change and melioration were possible, even if human improvement was limited—or so these doctors and writers thought—by gender and sexuality. Here, as elsewhere, the medical perspective could open an enormous vista on the human condition, helping readers to build a new understanding of self and society. It taught them proper behavior and proper boundaries, showing them what was possible with human nature and what was not. In the next chapter, we'll see how readers learned to apply these impulses in more immediate circumstances—here by profiling character through body signs and expression.

CHAPTER 4

Seeing and Knowing

Readers and Physiognomic Science

Our story continues with one of the first true medical fads to sweep the literary scene of postrevolutionary France: physiognomy, or as its practitioners called it, the art and science of seeing. With this term, observers denoted how one could divine a person's thoughts, intentions, and inner character by studying comportment, gestures, and other physical ticks, especially those made by the human face. One physician, in a dissertation submitted to the Montpellier medical faculty in 1800, described the importance of the physiognomic approach:

> The face of a man is the first thing upon which the observer's attention must fix itself, as well as the doctor who tries to read the body's internal state from external signs. In effect, it is the face upon which the thinking soul, as well as the sensitive soul, allows what is felt to be read.… Man's face becomes a living image upon which the passions are traced with energy. The face of a man, finally, is not only the image of the soul—*the soul itself rendered visible* [*sic*]—but also it reveals to us the manner in which the body finds itself affected.[1]

This broad interest in "the soul rendered visible" stemmed from the success of the Swiss thinker and religious figure Johann Kaspar Lavater (1741–1801) (fig. 4.1). Between 1775 and 1778, Lavater published a multivolume work titled *Physiognomische Fragmente*. The book electrified the larger republic of letters, appearing in French, Italian, and

English, and the reading public rapidly embraced Lavater's ideas. Historian John Graham has argued that the "evidence suggests no literate person in England or France could have escaped knowing [Lavater's] work either directly or indirectly";[2] while Graeme Tytler has even claimed that physiognomy influenced literary work so strongly that the European novel between 1770 and 1880 could be characterized as "essentially 'Lavaterian' in scope." "European culture in general," he argues, "appears to have been dominated by what may be aptly described as the Lavaterian physiognomical climate."[3] In France, by the early 1800s, physiognomical ideas appeared in a wide variety of works by Madame Roland, the Marquis de Sade, René Châteaubriand, Étienne Pivert de Senancour, Stendhal, and Honoré de Balzac, among many others.[4]

Fig. 4.1. Frontispiece, *Le Lavater portatif, ou Précis de l'art de connaître les hommes par les traits du visage* (1808). Bibliothèque Nationale de France. Johann Kaspar Lavater became an icon for studying corporeal expression and gesture in postrevolutionary France.

Explaining this diffusion, however, poses challenges. Traditionally, historians such as George Mosse have identified physiognomy as a critical link in the story of European

racism, part of the broad process of classifying and stereotyping people according to their ethnic and racial background, culminating in the colonialist and fascist discourses of the twentieth century.[5] More recently, some scholars have reconsidered this approach and have tried to understand physiognomy within the larger world of European arts, letters, and sciences. For example, Ludmilla Jordanova has argued that Enlightenment physiognomy influenced literary and scientific culture because it helped navigate "the unstable boundaries between magic and physiognomy and … the relationship between God and nature."[6] Accordingly, three qualities separated Enlightenment physiognomy from the racist profiling found in the later nineteenth and twentieth centuries. Foremost, physiognomy promised to reveal the inner soul and character by allowing the observer to see inside another person and make the inner world visible. Second, it claimed "moral status" because it explained human nature, societal interaction, and God himself. Finally, it aspired to become a "human science" in that physiognomists said that corporeal language could help unravel the mind–body problem. If physiognomy seemed contradictory or incoherent, it was because practitioners used it in such diverse manners, making it into a "form of inference."[7]

While these different philosophic qualities—concerning divination, character, natural theology, and medical practice—capture ongoing concerns within physiognomic discourse, they inadequately explain why physiognomic writings swept such a wide breadth of French intellectual life after the Reign of Terror. By 1810, fifteen distinct versions of Lavater's original book were in circulation, while editors published numerous other physiognomic texts, many of which appeared either during the Directorial Republic or the Napoleonic Empire. Tytler, for example, suggests that the upsurge in physiognomic writings reflected the backlash politics of the postrevolutionary period, notably with Catholic revivalism and how contemporaries rejected Enlightenment materialism in favor of more idealistic or spiritualist beliefs.[8]

While backlash politics informed physiognomic discourse, other factors potentially explain why physiognomy appealed to many different political, social, and intellectual figures in the postrevolutionary period. Two trends seem important in this setting. One of physiognomy's defining features, I suggest, was its ideological and philosophical malleability; no single social group monopolized it, nor was it monolithic in ideological scope. Physiognomy proved malleable because it gave contemporaries ideas and language with which they could understand the new social and political types that emerged after 1789, irrespective of their private political, philosophic, or religious attachments. It allowed people to observe and assess one another, now that the old insignia and traditions associated with aristocratic and religious authority had been swept away, giving them a sense of agency in control when navigating antagonistic or unknown social and cultural situations.

At the same time, physiognomy also fit into the growing world of medical writing, genres, and subcultures in the postrevolutionary years. These texts reveal complex intersections between official and subcultural values, insider and outsider medical groups, and more conservative or radical ways of looking at the world. Like the natural histories of women, physiognomy constituted a hybrid discourse, one that circulated within different political, religious, and philosophical groups, because people could adopt

its ideas and approaches in markedly different social and cultural settings. Here, physiognomy underscores how contemporaries used medical books as a technological medium to transmit ideas, shape values, and identify like-minded constituencies, a trend that only increased in the following decades. Authors and editors sometimes reproduced the same documents and images but transformed their meanings by framing their texts in unique ways to appeal to different groups of readers. Appropriation, in this regard, became a flexible and open-ended process characterized by multiple levels of interest and agency.

Physiognomy was an old idea, one that dated back to antiquity itself, and it had long fit social and intellectual needs in the European scene. As physiognomic practitioners liked to remind their readers, observers had always tried to understand other people—whether character, private thoughts, personal agendas and desires, personal intentions—by scrutinizing facial expression, gestures, and movements.[9] The Scientific Revolution and printing press, however, sharpened these impulses and gave physiognomy a modern flavor. This trend started with Giovanni Battista della Porta's *De humana physiognomonia* (1586) and René Descartes's *Les Passions de l'âme* (1649), both of which had promoted physiognomic ideas within the republic of letters,[10] and doctors incorporated these insights into medical practice, seeing them as essential tools for diagnosis and prognosis. Within aesthetic circles, physiognomic ideas influenced how academicians trained young artists, as with Charles LeBrun's *Conférence sur l'impression des différents caractères des passions* (1667), and other writers explored physiognomic techniques in courtly manuals, as with Marin Cureau de la Chambre's *L'Art de connoistre les hommes* (1659–1669).[11] The early Enlightenment produced its brand of physiognomic texts—notably with works by Jacques and Antoine Pernety[12]—and artists such as Joshua Reynolds and William Hogarth established new guidelines for depicting expression and character types, including caricature.[13]

Nonetheless, it was Johann Kaspar Lavater who defined physiognomy at the end of the 1700s. Lavater belonged to a group of writers, artists, and scientists who hailed from Enlightenment Switzerland, including the health crusader Samuel-Auguste Tissot, the physiologist and poet Albrecht von Haller, the naturalist and theologian Charles Bonnet, and the visionary painter Henri Füseli. Born in 1741, Lavater studied theology in Zurich and was ordained as a Calvinist minister at the age of twenty. In 1782, he became pastor at the prestigious St. Peterskirche, where he distinguished himself by his energetic and emotive sermons. At the same time, he engaged the larger intellectual scene in Europe, translating Bonnet's book *Palingénésie philosophique* in 1769, and he traveled widely in northern Europe, meeting the religious poet Friedrich Gottlieb Klopstock and the Jewish philosopher Moses Mendelssohn, among others. For many educated observers, Lavater embodied the *Aufklärer* ideal in the German-speaking lands: devout but open and tolerant toward different people and new ideas (his anti-Judaic exchanges with Mendelssohn notwithstanding).[14]

In the 1770s, Lavater published his first essays on physiognomy—he dubbed them "fragments"—and major figures such as Johann Wolfgang von Goethe and Johann Bernard Besedow hailed his work (though Goethe later rued his initial enthusiasm).

Lavater appealed for several reasons. First, he presented a vision of mind, body, and soul that allowed sympathetic readers to combine scientific and spiritualist approaches to human nature. Further, Lavater offered himself as a model intuitive observer—ingeniously conflating physiognomy with his literary persona—and promised readers they could do the same with practice and study. Lastly, he wrote in an engaging and open-ended style, addressing readers as though he were writing an epistolary novel. He promised them that they could use his book in any way they saw fit.

Throughout his writings, Lavater never approached physiognomy in abstract philosophical terms. His book was not a formal treatise. Quite the contrary, he wanted to inform and delight readers. He treated them as absorbed interlocutors, and he sought to nurture their physiognomic interests by giving them an engaging series of essays, anecdotes, techniques, and images. Through these means, they could learn to recognize and interpret the body's rich sign system—and do it all by themselves.

Lavater defined physiognomy as the "talent of knowing man's interior by his exterior." This "immediate understanding," as he called it, constituted a "veritable science," one rooted in careful observation of nature.[15] Physiognomists could learn to read people's expressions and gestures, taking them as natural and artistic objects, and thereby access their exact thoughts and convictions. However, physiognomy did more than identify what other people thought. Rather, it revealed the essence of character: the human soul. It was a process tied, not just toward understanding others, but also to *self-illumination*, and formed part of the Socratic injunction to know one's self.[16]

To decipher human character, readers must learn two techniques: physionomy and physiognomy. The first, physionomy, studied the totality of bodily functions: "the exterior, the surface of man, considered in the state of rest or motion, whether in original or representational form." The second, physiognomy, studied specific elements of expression. It was, as he put it, "the science that teaches to recognize the relation between the exterior and the interior, of the visible surface and that which encompasses the invisible, of animated and perceptible matter that imprints [the person] with the character of life, of manifest effect with the hidden forces that produce it." In short, Lavater said, "Physionomy is only the appearance of the face, and Physiognomy is the understanding of the face and its expression."[17]

Lavater wanted to give physiognomy a scientific and aesthetic grounding. Readers, he said, should know something about the physical and moral qualities of humankind. They should familiarize themselves with the physiological ideas developed by leading naturalists such as G.-L. de Buffon, Albrecht von Haller, and Charles Bonnet, as well as the anthropological systems expounded by Peter Camper, Johann Friedrich Blumenbach, and Johann Herder. Medical theories about temperament and predisposition could help them too, particularly in how humoral qualities affected emotional states and behavior. Then there was the world of artists, of whom Raffaelo Sanzio da Urbino (Raphael), Peter Paul Rubens, and Anthony Van Dyke figured prominently. All the while, aspiring physiognomists should cultivate their own bodies and minds, since they should possess a pleasing figure, a sensible disposition, and a keen spirit. They should travel, as well, learning the cultural differences between peoples.[18]

According to Lavater, the human self comprised three specific levels—the physical, the

moral, and the intellectual—and the fusing of these three levels made the person into a whole "being." Physical life encompassed vital functions such as respiration and digestion and expressed itself in human movement. It was, he said, "the characteristic exterior of man's physical and animal forces." Moral life, by contrast, comprised mental faculties and the "expression of the faculties of human understanding." These qualities, which he attributed to the "human spirit," manifested themselves in "the head and the interior of the front." Lastly, intellectual life, which for him defined the human condition, revealed itself in "the traits of the face and in their play."[19]

According to Lavater, each level condensed itself into a specific body part or bodily function. He then mapped these qualities onto the face itself, localizing them in the eyes, the nose, the chin, the eyebrows, and the forehead. To read the body, physiognomists must analyze or "decompose" each part systematically. "Always start, I repeat, by separating and simplifying objects: observe, compare each part, each line, each point, as if it were a question only of observing and comparing it alone."[20] Nothing should escape the physiognomist's gaze, whether the shape of the skull, the eyes, the nose, the cheeks, chin, mouth, lips, teeth, ears, neck, hands, chest, arms, legs, and feet. These details allowed the physiognomist to "judge everything, to determine all these relations with exactitude and there find the expression of the dominant character."[21]

However, physiognomists needed more than scientific skill. They also required a sensible or intuitive spirit, a spirit incarnated, most famously, in the sentimental attitudes found in the novels of Samuel Richardson and Jean-Jacques Rousseau. And to acquire such feeling, readers should cultivate the sentimental mentality personified by Lavater himself. This mentality constituted an essential part of a physiognomic analysis. Lavater insisted that physiognomists needed more than a rational and enlightened attitude. They must enrich their private sensible and sentimental nature, as well. All individuals were complex beings, full of emotional depth and potential, and the physiognomist should approach them with great feeling and empathy, as well. Only by combining sense and sensibility—somehow fusing Voltaire and Rousseau, if you will—could they unleash their intuitive sense and recognize these qualities in others. This emotional awareness, he believed, revealed more than the inner world of other people; rather, it promoted greater understanding and harmony among all men and women—qualities that he called, in the original German, *Menschenkenntniss* and *Menschenliebe*.

Spiritualism infused Lavater's work. He upheld a dualistic view of mind and body and rejected what he considered to be philosophic fatalism associated with the radical philosophes: C.-A. Helvétius's radical environmentalism, on the one hand, and d'Holbach's materialist determinism, on the other. For Lavater, a person's physiognomy was God's special seal, a divine signature that revealed how each was a unique act of creation. Following St. Paul's epistle on gifts, Lavater said that God had given every person a unique role in the world, distributing different gifts to different people in different measures. He saw this view not as rationalizing an existing order of things but as asserting the moral dignity of each person. "Everyman," he said, "can only do as he is able and can only be what he is.… Each person ought to be measured by his proper forces." By accepting or embracing one's gifts—and not by focusing upon our desires or other people's opinions—individuals could liberate themselves from the tyranny of

expectations. "The question," he wrote, "is not knowing 'what we would do in his place,' but rather 'of what he is capable of doing in light of the faculties which he's been given' or what one might attain in the circumstances in which he finds himself."[22]

When Lavater described faculties as gifts, he underscored a core tenet of his physiognomic system, one that distinguished his ideas from the phobic and racist elements often associated with physiognomic practice in the later nineteenth century. Not that Lavater avoided preconceived notions about human nature and character types. He did use them. However, he further said that physiognomical science permitted no one to label other people or pigeonhole them or to change them. Embracing sentimentalist impulses, Lavater believed that physiognomy allowed observers to appreciate the moral nature of each human being—an idea, associated with Rousseau and Kant, which had a democratic if not a radical and subversive quality to it. The Creator endowed people with their physical and moral characteristics, broadly construed. One could hardly alter the shape of one's nose, the color of their skin, or the fullness of one's lips. And while education might improve some qualities, it could never change them totally; nor could a person ever become something that deep down they were not (which was the lesson of Goethe's *Wilhelm Meister*).

Once individuals had understood these limits—a point that the "natural history of women" had also preached—they could then nurture their inner qualities and give their physical features greater expressivity. A person became beautiful when they could physically manifest his or her character; the soul's beauty filled the body and elevated it to an aesthetic plane. Physiognomic practitioners, said Lavater, never dismissed their fellow human beings or treated them in a demeaning manner simply because their bodies failed to measure up to socially determined standards of beauty. As he put it:

> Oh my reader, never forget that the last man is still a man and that there remains in him good qualities—and that he is still unique in our species and as needed as you … and that in each of his bodily parts he is an individual, just like you.[23]

In this regard, physiognomy helped nurture the evangelical call to attend the human soul and reconcile worldly activities with God's calling and plan. Self-cultivation, said Lavater, became a vocational exercise, the logical extension of one's inner discernment. His work spoke to the educated classes in postrevolutionary France because he fused the natural and the divine orders, science and spirituality, intuition and rationality, and individual and collective categories. It appealed to the shifting, syncretic intellectual landscape of the time and possessed an ideological malleability. Any person, it turns out, could adapt Lavater and use his ideas, their own religious beliefs and political sympathies notwithstanding.

Besides Lavater's appeal, two additional factors drew French readers to physiognomy. Both originated in the revolutionary experience itself: first, new institutional and theoretical overlaps between art and medicine; and second, sweeping changes in the urban environment, above all in Paris.

Foremost, new aesthetic ideas and institutional practices helped shaped physiognomic

discourse. Observers had long associated physiognomy and artistic training—as seen with Charles LeBrun—but institutional changes during the Revolution intensified this link. Ever since the royal government had created the Académie Royale de Peinture et de Sculpture in 1648, pedagogues had taught human anatomy to art students so they could better represent facial expression and bodily gestures. By the mid-eighteenth century, however, reformers were insisting that greater physiognomic precision was needed. Young artists, they alleged, lacked adequate scientific training, thereby depriving them of an essential tool for communicating realism and depth. In response, they championed new methods of anatomical instruction and looked to medical science to teach them about human expression. Lavater's physiognomy could serve as a tool to create more dynamic and real-seeming images—not just when portraying emotional expression but when revealing deeper qualities associated with character.[24]

These academic concerns informed the works of J.-J. Suë the Elder (1710–1792) and his son J.-J. Suë the Younger (1760–1830). Both father and son had trained in surgery and the fine arts and both held teaching posts at the prestigious Académie des Arts. Suë the Younger, in particular, focused upon physiognomy and used post-Thermidorean reforms to further integrate the subject in the academic curriculum. For him, mutual dialogue between scientists and artists was needed because both traditions could profit from one another, unveiling the essential truths about the natural world. Nowhere was this collaboration needed more than with anatomy, the art and science that studied the material processes that gave the body its character and appearance.

Suë the Younger stressed that anatomical training could enhance physiognomic understanding. According to him, physiognomy revealed the mind–body relation. All moral character—all virtue and vice—expressed itself in the human face and bodily movement, showing the vital principle in its fullest sense.[25] Physical expression thus constituted "what is common to all individuals within the human species or what distinguishes universally our own bodily organization from any either animal or vegetable organization."[26]

When promoting hands-on anatomical training, Suë rejected earlier instructional and pedagogical devices—such as plaster casts, illustrations, and manuals—because they provided only replicas or imprecise simulacra that failed to duplicate what the artist experienced by himself in the dissection laboratory. In fact, Suë said, the artist's first instrument should be neither the chisel nor the brush but rather the surgical scalpel. Through this tool, the artist could reveal the full nature of the "animal economy."[27]

Another, more intangible element contributed to physiognomy: innate talent or intuition. Following Lavater, Suë insisted that artists could only grasp character if they themselves possessed a dynamic sensibility. Following ideas developed in Diderot's salon criticism as well as those by physiologists such as Théophile de Bordeu, Süe celebrated an imaginative world of intuition and sympathy, if not genius. For this reason, the fine arts could unveil the hidden springs of human nature, perhaps even more so than science itself.[28] Scientists might evince brilliant acumen, but in the end, they were decoding something that already existed in nature—they themselves seldom saw or created anything new. The artist, by contrast, represented the world in a unique and novel manner, enabling the spectator to see or experience something they otherwise would

not. The fine arts penetrated appearance and plumbed the deeper nature of things.

Physiognomy thus allowed the sensitive soul to assess the character and inner experiences of another person. A whole world opened up for gifted observers, allowing them to divine people's faults and transgressions and see how vice could deform expression and grace. These physiognomic insights mattered in situations beyond artistic practice, including everyday interactions. In Suë's words: "This power is the exclusive power of Man, the soul being endowed with reason and intelligence, that inestimable and distinct gift that bends the whole universe to his power."[29]

These same ideas appeared in the writings of Pierre-Marie Gault de Saint-Germain, one of Suë's colleagues in Paris, who was known for his artistic work, aesthetic criticism, and writings on natural history. Gault de Saint-Germain emphasized that one particular organ connected psyche and expression: the brain, whose physical proximity made mental function and physical expression almost instantaneous.[30] That said, appearance reflected something other than biological essence. Instead, it encapsulated a person's past experiences and habits, all of which molded physical expression and gesture. Following Lockean psychology, Gault de Saint-Germain said that the body became a palimpsest upon which a person inscribed their entire moral and emotional life. Sensibility thus molded one's physiognomic characteristics, more so than any innate or preexisting determinants.

However, Gault de Saint-Germain added something new to this discourse: politics. For him, political sensibilities shaped a person's mind and body, imprinting these passions upon facial expression and gesture. Politics aroused unique emotional and physical qualities, all of which potentially deformed or denaturalized one's character and physique. As he put it, "the frequent experience of violent passions"—and here he meant political opinions—could "decompose [bodily] traits and often print them on one's physiognomy."[31]

Gault de Saint-Germain put his finger upon a larger concern. The way he linked political passions and expression, in part, illuminates why physiognomy appealed so strongly to contemporaries starting in the 1790s. The French Revolution had not just overturned a system of government or replaced one governing group or class with another. Instead, it had transformed a universe of representation and meaning—how one understood and represented social and natural realities.[32] This transformation extended into the realms of feeling and sociability. Contemporaries could no longer use the old signs and insignia when trying to assess the people with whom they interacted. These changes confused observers and engendered significant anxiety. Physiognomy, its practitioners claimed, helped them navigate this uncertain and chameleon-like world.

Beyond these interpersonal changes, another factor fueled uncertainties and anxieties: significant urban changes. In addition to political violence and civil war, the Revolution had instigated large-scale movements of people and massive changes in property and ownership patterns, creating whole new classes of hitherto-unknown social and political elites.[33] In Paris, developments had altered the urban landscape in stunning ways, as the government built new public spaces while other buildings or entire neighborhoods fell derelict. What had once been solid in the urban landscape seemed to melt away, just like with the ruined landscapes of Paris painted by Hubert Robert in the 1780s and 1790s.

These observations appear in travel accounts. In 1798, Louis-Sébastien Mercier described how Paris had changed in his remarkable sequel to his famous Old Regime travelogue. In this book—titled *Le Nouveau Paris*—Mercier told readers how the French Revolution had changed the inhabitants and the landscape of the great capital city. Paris, he wrote, had always been "a unique city, where one finds what one wants actually of personalities of every species and every color."[34] The revolution had increased this rich diversity and rendered Paris even more fantastic and exotic. Political events, he said, "had overturned the morals and manners of a peaceful people, changed their habits, their laws, their customs, their administration, their altars, and in turn inspired in them the most heroic courage and the most cowardly violence." As he saw it, "The greatest miracle is that this superb city is still standing."[35]

Throughout his book, Mercier insisted that Paris had become a new city and with this transformation came many new and unknown people, all of which required a new travel literature to describe them. A similar perspective emerges with Louis-Marie Prudhomme's *Voyage descriptif et philosophique de l'ancien et nouveau Paris*, which first appeared in 1814. Prudhomme was a publisher and political militant. Having participated in Parisian sectional life during the Reign of Terror—he was fortunate to have survived—he returned to writing and editing after the Thermidorean reaction. Like Mercier, he also interested himself in physiognomy: in 1808, as we shall see, he established a private publishing house in Paris called the "Bureau de Lavater" that printed J.-L. Moreau de la Sarthe's revised edition of Lavater's works.

In this travelogue, Prudhomme described the "new Paris" quarter by quarter and filled his account with picturesque anecdotes about the city and its inhabitants. Starting in 1789, he said, revolutionaries had rebuilt the city: they had pulled down the Bastille, suppressed the old religious orders and overhauled church properties, built new public monuments, planted liberty trees everywhere (Paris, he said, now resembled a forest), and destroyed old symbols of monarchical and religious power. At the same time, municipal authorities had created new parks and other communal spaces, and public spectacles were ubiquitous. In all this, revolutionaries had done more than alter the cityscape; they also changed the bodies, minds, and habits of Parisians themselves, almost making them into a new species.[36]

A similar picture emerges in Jakob Heinrich Meister's *Souvenirs de mon dernier voyage à Paris*. Meister was a venerable figure in the European republic of letters, having published his writings in France and the German-speaking states. He was a Swiss Calvinist—much like Lavater, about whom Meister would write an essay comparing him to Diderot[37]—and he had long traveled across France. Regretting how the Revolution had changed French towns and countryside, he lamented that the new government had legislated all the old traditions away and rebuilt society from the ground up. Nowhere was this change more marked than in Meister's beloved city of Paris. He recounted his long strolls through the city environment and all the things he experienced and remembered with nostalgia and bitterness. He wrote:

> In going through the Paris streets, in my usual fashion with my head stuck out and my eyes wandering all around, eager to recognize so many objects of which I had

> attached some sweet memory, whether from interest or habit, I could not deny myself extraordinary feelings of surprise or fear. It always seemed to me that I was returning to a dear residence, abandoned by its old owners and now occupied by strangers—strangers, it seemed, who seemed uncertain whether they could actually stay there for long, and whose mood was, to say the least, weirdly bizarre … nothing seemed, so to speak, in its proper place.[38]

As Meister put it: in Paris, "in the end, there was nothing stable, nothing staid." Paris had lost its "natural" qualities and sense of normalcy. One new practice demonstrated the change in attitude: namely, how public authorities scrutinized people's identity papers and how this intrusive demand had become routine for French citizens. How bizarre, he said, to find such a practice in a country where people boasted all the time about "liberty."[39] At the same time, he was frightened by the new social types that inhabited Paris, especially the popular classes and idle street peoples. No one knew with whom and with what one was dealing anymore. The city acquired a menacing luster, one haunted by violence and loss—Paris was now a place where anything could happen, and sometimes it did.

Within this setting J.-M. Plane published his two-volume work titled *Physiologie ou l'art de connaître les hommes sur leur physiognomie* in 1797. Unfortunately, historians know little about Plane or the conditions under which he wrote his book. He was likely involved in several other publishing projects, and he may have been the same J.-M. Plane who translated Henry Mackenzie's celebrated sentimental novel, *The Man of Feeling*, into French in 1797.[40] Whatever Plane's background, his book was timely and it clearly spoke to readers. Subsequent editions appeared in 1803 and 1819 (with slightly altered titles), and an abridged version was published as late as 1908 as *Pour devenir physionomiste: moyens pratiques et rapides de discerner le caractère et les qualités des gens* in a series called "Petite bibliothèque des connaissances utiles."[41]

In the opening of his book, Plane announced that he was condensing key physiognomic ideas advanced by Lavater and "several other excellent authors." In his opinion, Lavater's *Physiognomische Fragmente* were too diffuse for ordinary readers, and so the market needed a more user-friendly edition. He thus looked to didactic books on science—reaching back to more illustrious efforts by Bernard Le Bouvier de Fontenelle, Emilie de Châtelet, and Voltaire—as well as the hygienic treatises pioneered by physicians such as A.-G. Le Bègue de Presle and Samuel-Auguste Tissot.[42] As with the books on the natural history of women, Plane interwove visual and textual elements together in a style that seemed like a collage; he wanted to appeal to particular reading constituencies, but he also allowed readers to move in and out of the text, appropriating ideas and images for themselves. Ironically, in so doing, Plane created a book that looked much like Lavater's —it was spiraling and open-ended—yet it spoke to new sociopolitical realities.

Plane wrote about physiognomy because he was a "physiognomist by instinct."[43] From an early age, he could interpret other people's gestures and expressions, figuring out what they were thinking. However, a good physiognomist required more than instinct. To illustrate this point, he told a story of a failed romance. It was about a young

beauty named Amélie, a woman with whom he had fallen passionately in love. Experience proved cruel to Plane, as he soon learned that Amélie's beautiful expression masked a "perfidious heart." Devastated, he found himself wondering how "such as beautiful face could be the mirror of a false and corrupted heart."[44] The chasm between perception and experience was so vast that he doubted his own senses. But not for long. Plane grasped, upon reflection, that appearance could not conceal one's true nature forever. Several years later, when he met Amélie again, her face told a different story. Her features had hardened into a grimace, and her gestures lacked grace and delicacy. No longer blinded by desire, Plane could now grasp her true nature. How much emotional anguish, he asked himself, could be avoided if people could learn to spot character beforehand?

When discussing human character, Plane favored the word "physiology"—the study of living functions—over Lavater's "physionomy" or "physiognomy" (though Plane used all three interchangeably). Like naturalist Charles Bonnet, Plane said that mind and body formed an interdependent whole. The "germ" of the human soul infused the physical body and shaped all its functions and expressions, even in small details like penmanship. "The human body," he remarked, "can be considered like a plant in which each part conserves the character of its stem." For this reason, "it is to this harmonic and communicative ensemble that we shall first apply our physionomic [*sic*] principles."[45]

Plane identified two physiognomic approaches: the "natural" and the "rational." As he explained it, "natural physiology" constituted the means by which people responded instinctively to gestures and expressions that were made by either humans or animals and judged them accordingly; children, in particular, evinced these instinctual impulses from an early age. By contrast, "rational physiology" was the method by which people could cultivate their instincts; through scientific teaching, they could learn to better interpret the deeper meaning behind surface expressions.

Individuals must cultivate this rational element to physiology, said Plane, because culture and civilization had diluted physiognomic impulses. Making a Rousseauvian argument, Plane insisted that modern life, with its manners and affects, had debased the body's natural language and had thus confused moral values and meaning—as seen, for instance, in the story of his misplaced desire for Amélie. Worse yet, human events could further denature physiognomic instincts, as recent political and social transformations had shown. "He who has observed the course and events of the French Revolution could distinguish in its principal moments an extreme transformation which operated within [people's] physiognomies."[46] Here sensitive souls—self-professing men and women of feeling—had become bloodthirsty monsters, perpetrating (or advocating) moral atrocities. In response, ordinary people must reclaim the body's primordial language and learn to judge appearance and character anew.

Though Plane encouraged his readers to study the entire body, all its gestures and affects, he emphasized that readers should focus upon the face, which he declared was "the main seat of the spirit and all intellectual faculties."[47] The reader best entered this world by learning the art of portraiture, a genre which he thought had received insufficient attention in the academic hierarchy of genres (which privileged historical and religious themes in art instruction). Official taste notwithstanding, portraits had great

aesthetic and philosophical value. Portraits were neither narcissistic nor indulgent; instead, they fulfilled deep psychological needs, allowing people to celebrate loved ones and remember them when they were gone.

On the artistic level, portraits were studied affairs, an essential moment in self-analysis and illumination, for both the artist and the subject alike. A well-executed portrait did not just render a life-like image (what the person "really" looked like); it also captured an essence or truth that one might, in good physiognomic fashion, call *character*. Portraiture thus transcended objective nature and revealed more profound realities; portraits became not a mirror but a lamp that illuminated a person's inner life. The physiognomist must bring this same interpretative and intuitive element to his or her analysis; physiognomy was more than just staring into a reflection, a vain glance into a dark mirror.[48]

To peer into this looking glass, Plane returned to medical ideas about temperament and predisposition. Medical authorities, going back to the Hippocratic corpus, had long argued that humoral balances shaped not just disease susceptibility but also a person's character, personality, and behavior. Traditionally, doctors recognized five temperaments: the phlegmatic, the bilious, the choleric, the melancholic, and the mixed temperament. Following Lavater, Plane put this material into a physiognomic framework, connecting predisposition to intellectual aptitude, emotional outlook, and qualities associated with character. However, Plane went one step further, no doubt reflecting immediate revolutionary experiences: he fused humoral temperament with political attitudes—something Gault de Saint-Germain had done—thereby conflating the moral, the physical, and the political self.

When discussing politics and physiognomy, Plane drew upon Montesquieu's *L'Esprit des lois* and identified three primary political attitudes: the monarchist, the republican, and the tyrannical. Each political attachment shaped the person, in both positive and negative ways, and revealed itself in physiognomical expression. Monarchical governments, for instance, disfigured their subjects because the political system forced them to conceal their thoughts and opinions, replacing them with politeness and flattery. Hence, people corrupted their natural sensibility and developed grotesque facial expressions instead (as seen with Amélie). By contrast, republican-style governments elevated both the individual body and the body politic itself. Ancient statuary art reflected these "charming traits," especially in its statuary forms, all of which personified "public and individual prosperity."[49]

Though Plane described a range of political temperaments, he focused upon two characters: the sanguinary and the melancholic type. For him, the best person for political life remained the former. The sanguinary physiognomy incarnated their superior temperament. They had blue eyes, delicate contours, and smiling lips. The skin appeared soft and white, but it was never effeminate. They were animated and sociable and enjoyed the community of men and women. And though they were imaginative and impetuous, they maintained a "sensible and true heart."[50] Sometimes sanguinary types could become irritated and indignant, and injustice revolted them and roused them to action. Still, they remained moderate and levelheaded, and they seemed immune to passion and high-flown rhetoric and style. When sick or discouraged, sanguinary types suffered stoically and sought solace in the quiet of nature. Rejecting conventional

religion, they were drawn toward mystery and devotion, particularly gothic architecture, church bells, old hymns, rituals, and tradition.

By contrast, Plane painted the melancholic character in negative and menacing hues. Most of them, he averred, were ambitious scoundrels. Their minds became obsessed with particular ideas, figures, and events. They seemed unable to partake in civil society—good living or *bonhomie* puzzled them—and maintained a taciturn appearance, denying themselves, at least in public, Epicurean pleasures. They wanted others to admire their intelligence and accomplishments, but they could become jealous and hateful of other people's popularity.

The melancholic type possessed specific political characteristics. Melancholics spouted high rhetoric about moral virtue, but they were hypocritical and unable to bear criticism and ridicule. Solitary and misanthropic, melancholic types were also timid, suspicious, and mistrustful; but once they surrendered to their passions and obsessions, they became immune to reason or pity. "Melancholics are almost always jealous lovers, tiresome friends, troubling neighbors, tough and austere fathers, and sad and despairing husbands."[51]

Violence tormented the melancholic character. Melancholics were self-righteous and never doubted their moral rectitude, even when they became cruel and unjust to others. In times of crisis, they spurned human feeling and became cold and inflexible toward those people they branded as immoral, even when they were friends, neighbors, and family members. These personalities, said Plane, were recurring figures in all the great tragedies of French history, from the religious wars of the sixteenth century to the *enragés* and Jacobins of his own time. In the political realm, the melancholic person was nothing short of monstrous. He wrote:

> The strongest enterprises, the darkest plots, the most unexpected betrayals, the most terrifying designs, the most uncommon plans: nothing disturbs the dreaming melancholic; nothing disgusts him. He throws himself in front of danger with a blind impetuousness. The more he reflects, the more he loses himself, and what can the light of his weak reason do against the burning torches of hate and fanaticism, since infamy and death remain, in his eyes, a martyr's palm branch?[52]

Plane's sketch, of course, prefigured the image of the Jacobin fanatic that appeared in many prominent European literary works, ranging from Karl Georg Büchner's *Dantons Tod* (1835) to Victor Hugo's *Quatre-vingt treize* (1874) and Anatole France's *Les Dieux ont soif* (1912).

Plane provided images of historical (and fictional) figures to illustrate moral character, including Homer, Virgil, Shakespeare, J.-J. Rousseau, and Voltaire (fig. 4.2), all of which allegedly personified national or ethnic characteristics. However, Plane featured more recent figures from the revolutionary period, as well. Many of them he assumed his readers knew, political celebrities who needed no or little introduction (likely having attained this status through caricatures in the political press). For example, Plane provided engravings of Louis XVI and Marie Antoinette: the former he characterized as a phlegmatic personality who lacked resolve, while the latter suffered from "a defect in

energy and reflection" (fig. 4.3).[53] Remarkably, Napoleon Bonaparte appeared in Plane's panorama—the year was 1797, right as he began his mercurial rise in his Italian campaigns—and Plane said the young general showed "bravery and loyalty" and could "take, at first glance, the wisest and heroic part" in events.[54]

Throughout, he said, physiognomists must account for that new force that had appeared during the French Revolution: political passion. This quality marked the physiognomies of revolutionary leaders. For example, he included Jean-Paul Marat and Georges Danton, claiming their facial expressions had been corrupted by their violent words and deeds—"those two bloodthirsty men" with "their atrocious and criminal physiognomies" (fig. 4.4).[55] Between these revolutionaries, Plane placed a picture of Charlotte Corday, who had murdered Marat in his bathtub, and asked how this beautiful face masked a cold-blooded assassin. Even a person with a delicate physiology, he marveled, could commit stunning acts of political violence. Plane then contrasted Corday stabbing Marat to Judith beheading Holofernes—a political act, one might point out, that readers could construe as patriotic heroism.

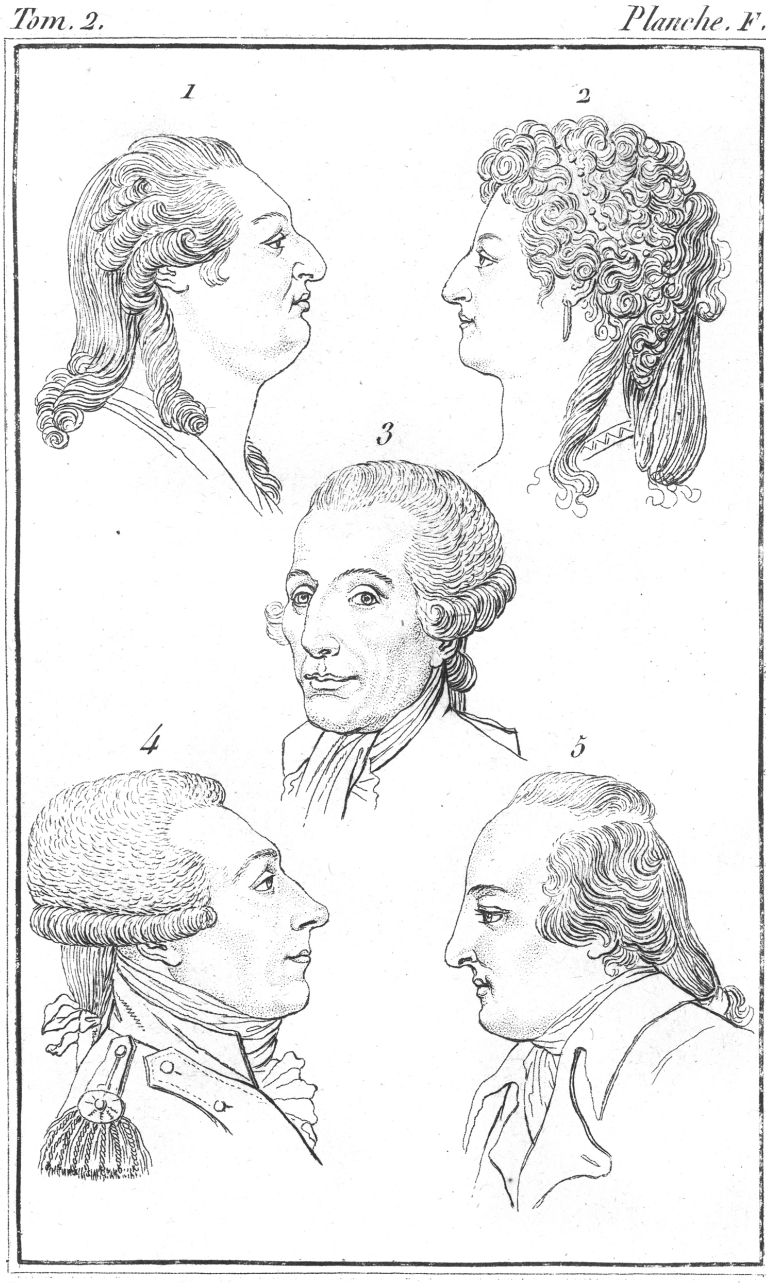


Fig. 4.2. Plate from J.-M. Plane, *Physiologie, ou l'art de connaître les hommes sur leur physionomie, ouvrage extrait de Lavater et de plusieurs autres excellens auteurs*, 2 vols. (Meudon: P.-S.-C. Demoilly, 1797). Bibliothèque Interuniversitaire de Santé, Paris. Plane used Lavater's method to decipher political types and figures. Louis XVI and Marie Antoinette appear in this gallery of headshots. He did not so much identify all his figures as assume

reader familiarity with their images, no doubt relying upon their ubiquity in political images and caricatures.

One physiognomy stood out for Plane: Maximilien Robespierre, the person who for many incarnated the Reign of Terror itself. Any serious physiognomist, said Plane, could spot this man's bloodthirsty character, something that emerged from deep within his blackened soul. The evidence appeared on his face: "his lively and penetrating eyes, his somber and frank gaze, his remote nostrils, the contract of his lips: one recognizes without difficulty in his traits the ambitious, atrocious, hateful, and vindictive man." His expression suggested "relentless cruelty" and his nose revealed "an anger that was calculated and capable of the greatest excesses." "He used to have, in his hands, shoulders, neck, and eyes, a convulsive movement." Plane diagnosed him with a bilious or melancholic temperament—as we have seen, critics associated melancholia with Jacobinism—yet Robespierre, he added, could also conjure sublime degrees of energy and strength. Readers should admire such forceful qualities but fear them when they appeared in the wrong people.[56]

Plane emphasized another point. Physiognomy, he claimed, allowed people to become better citizens, as these skills could help them decipher the moral characters of political leaders and thus avoid scoundrels who could bring bloodshed and tyranny (a point he himself apparently missed with Napoleon).[57] Hence, Plane excitedly celebrated the physiognomic profile of Benjamin Franklin (fig. 4.5). None of the French revolutionaries could compare to Franklin, a man who combined moderation, enlightened values, and republican spirit in equal measure. Franklin was a "new Prometheus" and "a good man, an upright man who is unified [*uni*], sincere, firm, reflective, and generous." These positive qualities shone forth in his physiognomic profile. "Happy America!" gushed Plane. "A land still of virgin soil!" The French Revolution lacked political heroes on par with the American founding fathers, who had spawned no "bloody monsters."[58]

Physiognomy benefited everyone. Observers could discern anyone's character and agendas. Moving from public to private life, Plane promised that physiognomy allowed readers to discover true love and establish a harmonious and fulfilling life, both within the home and within the community. Better yet: readers could use physiognomy to scrutinize all the people who came in and out of their daily lives, thereby allowing them to protect private life against politics and social change. He concluded:

> I wish to represent the adolescent who is looking to form relationships of friendship, a man who wants to choose a companion according to his heart, a father who wants to find a teacher for his children, a man of means [*homme en place*] who wishes to engage himself in a subject to distract himself in his work. All of these persons who are guided by physiology will sense the truth of its principles and will recognize that a man's exterior is deceiving only to someone who doesn't want to reflect about it at all.[59]

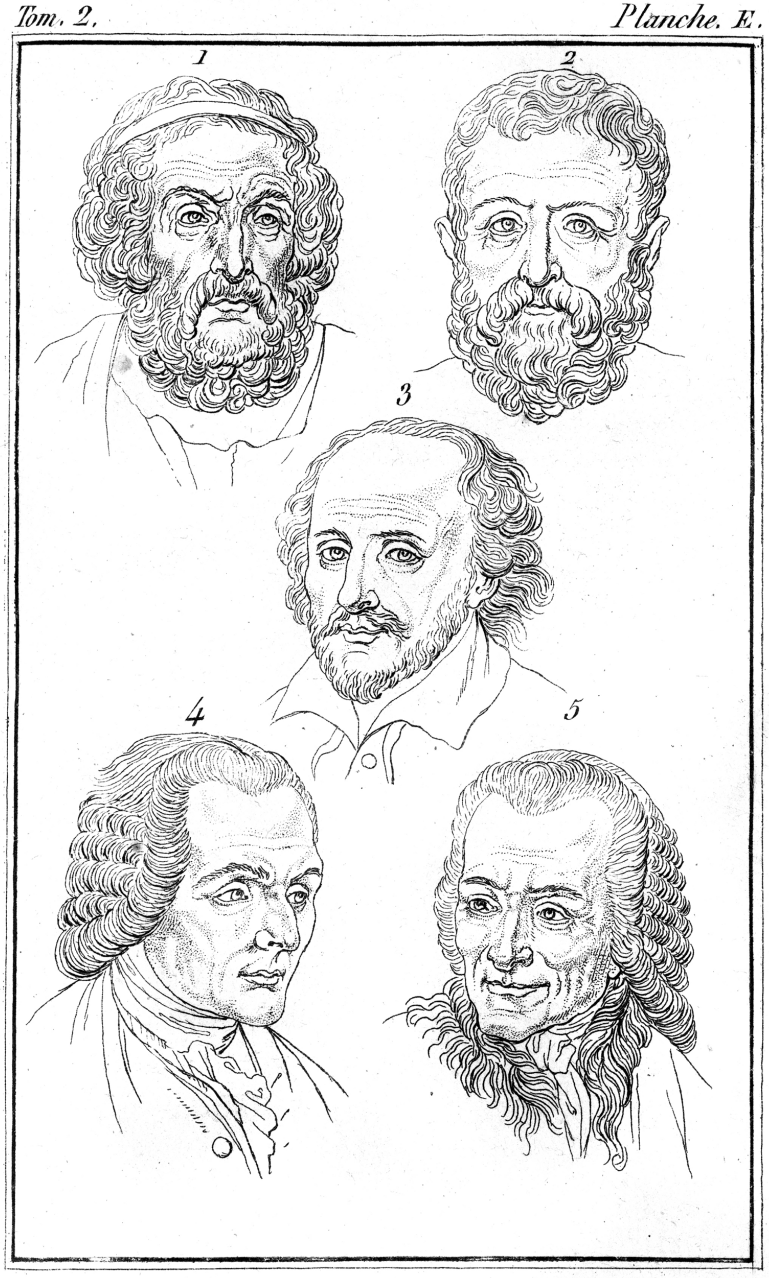


Fig. 4.3. Plate from Plane, *Physiologie*. Plane presented physiognomies of prominent authors—notably Homer, Virgil, William Shakespeare, J.-J. Rousseau, and Voltaire—to illustrate not just personality, but also national or even ethnic stereotypes.

Fig. 4.4. Plate from Plane, *Physiologie*. Maximilien Robespierre, Charlotte Corday, Georges Danton, and J.-P. Marat are explicitly identified and analyzed in the text itself.

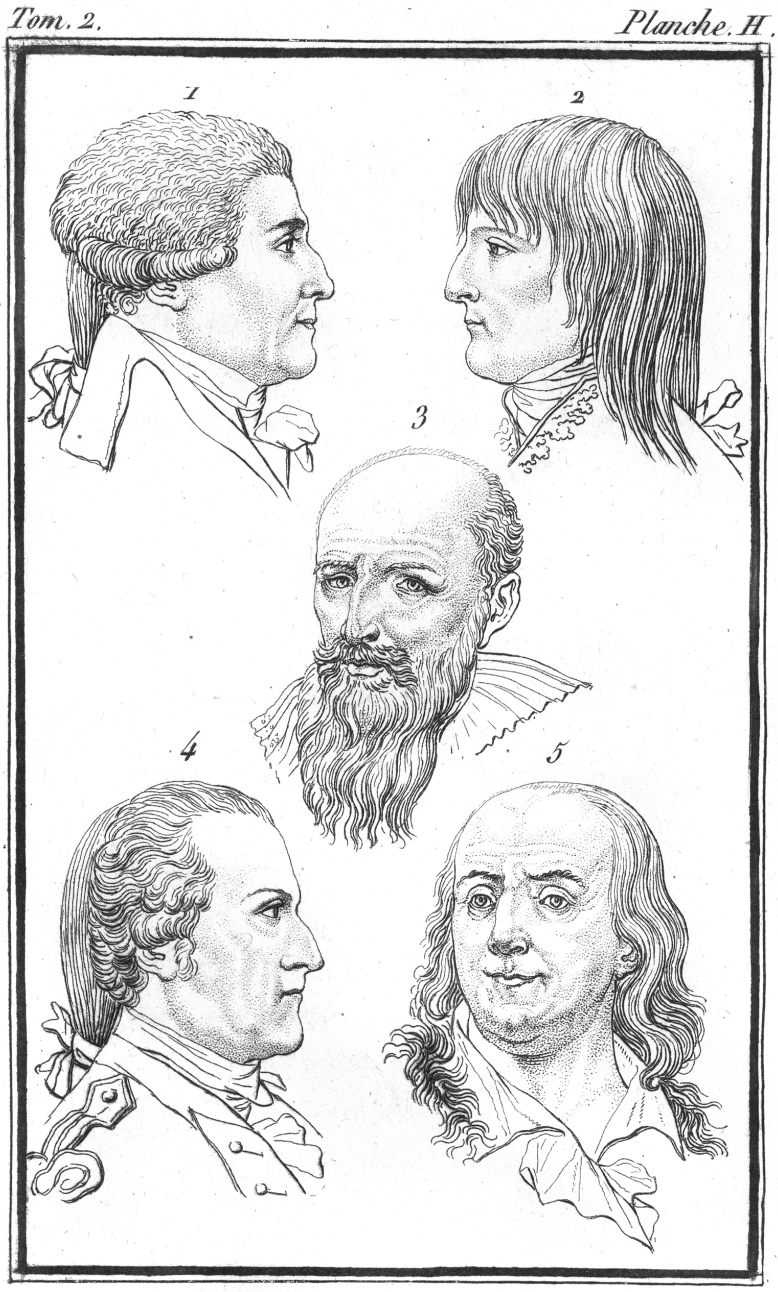


Fig. 4.5. Plate from Plane, *Physiologie*. The engraving contrasts the rogue's gallery of revolutionary figures presented earlier. Here, Plane portrays a young Napoleon Bonaparte, King Henri IV, and Benjamin Franklin as favorable political actors.

Plane inspired other writers and editors in short order. Between 1797 and 1813, there appeared an array of popularized "how to" physiognomic manuals, all which constituted a distinct genre of "pulp physiognomy." The titles alone suggested their agendas and targeted readership. These books ranged from *Le Petit Lavater ou tablettes mystérieuses*—which combined physiognomy and astrology—to several "portable" physiognomic manuals, two books by Edouard Hocquart titled *Le Lavater des dames* (1812) and *L'Art de juger le caractère des hommes sur leur écriture* (1812), and the satiric *Indiscrètions de Lavater* (n.d.). These books—some of which have since disappeared but were advertised or reviewed in medical journals—soon warranted bibliographic guides. Here, editors linked physiognomy with phrenology, as it was developed by Franz Joseph Gall and Johann Gaspar Spurzheim and popularized in Paris in the early 1800s.[60]

This pulp genre had distinguishing characteristics. Readers believed that they should possess physiognomic skills and thus looked for easy-to-use (and entertaining) books by which to learn it themselves. Enterprising publishers grasped this desire, and many of these pulp volumes were cheaply made and marketed to the low-end of the book trade. Further, authors and editors calculated that readers already possessed firm political, philosophical, and religious opinions of their own; these books avoided shaping or imparting values and instead appealed to already existing opinions and constituencies. Several writers and publishers sidestepped ideological controversies altogether; while others, as seen with Plane, sought the middle ground.

These market calculations shaped the form and content of physiognomic books in other ways. Strikingly, many of these texts—irrespective of the writer or intended audience—adopted the same collage approach used by Plane, an approach which, as will be seen, was soon exploited by medical writers in other genres. Authors and editors borrowed from other physiognomic works, transposing excerpts (with or without attribution) or sometimes adding their own illustrations and anecdotes to enliven the text. No doubt, publishers figured that readers might purchase physiognomic books for their aesthetic quality alone. For this more discerning audience, such a book served as a status symbol, a piece of cultural capital, one that looked great on a bookshelf and which offered a handy conversation piece for household visitors.

This high-end quality emerges in *Les Règles physiognomiques*, a book which first appeared in a lavish folio format in 1803. Marketed to a cultivated audience, this short work summarized physiognomic skills by condensing Lavater's original text and reproducing key illustrations. Whoever assembled this book also referenced more recent scientific and medical works from the 1790s, especially those by Peter Camper, Johann Blumenbach, and Thomas von Soemmering. This up-to-date element assumed that potential readers possessed a degree of intellectual sophistication—the material quality alone guaranteed a narrower audience—and followed scientific and literary trends in the periodical press.

In *Les Règles physisiognomiques*, the publisher underscored how physiognomy enabled readers to navigate all sorts of complex interpersonal exchanges. With physiognomy, individuals could understand not just other people but also themselves. It helped them share what was in their hearts and minds far beyond the conscious level of words and gestures. As an intuitive body talk, physiognomy helped people encounter true friends

and companions in the road of life, where they could cultivate love and sympathy between one another, finding like-minded souls in an uncertain world.[61]

One challenge—so said *Les Règles physiognomiques*—was that human expression was endlessly diverse. The more complex the person, the more complex the gestures and countenance. Intelligence, sensibility, moral character, experience: these factors enriched a person's being and made it harder to decipher one's expression. As a consequence, the observer must study expression attentively and perceive how the soul revealed itself in the most delicate and subtle mannerisms. One needed a thoughtful and sympathetic gaze to penetrate the inner life of other people.

Similar themes appeared in a cheaper edition titled *La Physiognomie portative*, a two-volume work published by Bertrand Pottier and Félix Bertrand in 1805. This editorial duo had a knack for marketing medical fads to the reading public, as we will see in chapter 5 with Louis Robert's popular *Essai sur la mégalantropogénésie* (1801). Pottier and Bertrand wanted to capitalize further upon this kind of *succès de scandale*. In this book, they reprinted highlights from Parenty's original *Lettres philosophiques sur les physiognomies* as well as Lavater's *Fragmente* and added their own physiognomic observations and anecdotal stories. The book concluded with an essay titled "Fragments du promeneur physionomiste, ou Lavater indiscret," in which the author told purported dinner-party conversations and elaborated on the social embarrassments that could happen when one carelessly applied physiognomy in good society. Though the volume combined a range of texts and images, the editors designed it in such a way that it generated its own dynamic vision of physiognomy. In their hands, copying became a creative and individual act.

Like Plane, Pottier and Bertrand insisted that physiognomy allowed people to divine someone's real character. It sought neither power nor material gain. One needed to understand the "rule that nature has given us for judging men": namely, that inner character was written "across the face."[62] Though physiognomy was not an occult practice, Pottier and Bertrand suggested, it transcended the cold and calculating world of instrumental rationality. This scientific mindset, the book made clear, deprived humanity of the emotional sensibilities needed to understand one another—"that delicacy of discernment and necessary tact for knowing nature."[63] Physiognomy captured that sentimental impulse, described by Rousseau in his autobiographical *Confessions*, and allowed people to rediscover that "simplicity of heart" that contemporary society needed more than ever.[64]

For the physiognomist, the essential problem remained deciphering character, "the ordinary form under which the spirit reveals itself."[65] Character was hard to understand because people were complicated and ever-changing and experienced themselves in dynamic and ambiguous ways. One hardly understood one's self, let alone others. As Lavater himself had taught, these differences arose because of the multiplicity of human souls, all of which came from the hands of the Creator: "the diversity of souls that produces so much diversity among human characteristics."[66]

The editors emphasized two points about the self. On one level, physical determinants —originating from both within and outside of the body—could develop or transform the soul's original qualities and shape character and personality. Like a person's thoughts and feelings, the body itself was subject to perpetual change, sometimes in the course of a

single day. Heredity also shaped personality, as people inherited their humoral temperament and disposition from their parents. On another level, however, the text emphasized that development, education, and physical environment often marked a person. One's physical and moral constitution, therefore, could "gain" or "lose" in "thousands of different ways."[67]

Pottier and Bertrand's *La Physiognomie portative* addressed female readers in gallant tone and slyly inserted sexual topics into the mix. Unlike the "natural histories" written by Moreau de la Sarthe and Virey, whose work was marked by a strong misogyny, this book informed readers that women possessed the same aptitudes and spirit as men, except that they were more refined in their physical and moral sensibility. For these reasons, the book suggested that women might be superior to men and characterized them as the "better half" of the commonwealth. These remarks hardly constituted feminist politics, of course, but the tone still contrasted to official views about female character and aptitude, such as those espoused by Idéologue doctors such as Pierre Cabanis and J.-L. Moreau de la Sarthe.[68]

At times, *La Physiognomie portative* broached other questions about sexual behavior, including sodomy and pederasty. According to the text, some men were destined to become like women and some women were destined to become more like men, and between these sexual inversions there existed a broad range of sexual behavior and proclivity. One here returned to Plato's original ideas about human sexuality and androgyny in which four primary qualities—hot, cold, dry, and wet—combined in harmonious balance. In the act of generation, these primal qualities were dispersed unequally and thus created men and women. Sometimes, however, these attributes combined in unpredictable ways, and this biological novelty created individual beings who were sexually ambiguous or who had different sexual tastes and urges. Given this range of subjects, it seems clear that Pottier and Bertrand knew how to spice up their texts in order to make them sell better, the censorship and official morality of Napoleon's regime notwithstanding.[69]

In 1812, the publisher Saintin printed another anonymous edition entitled *Le Lavater portatif*. This title page billed it as the fifth edition, and it seems to have been adopted from an earlier version published by Madame Hocquart (identified as "veuve") on Rue de l'Éperon in Paris. Her husband, Edouard Hocquart, had self-published a similar book: this one promised to use Lavater's principles to understand women, and it even enjoined a short piece on how to breed children of genius—a topic that seemed to be preoccupying many readers in France at that moment.[70]

Like Plane's text, *Le Lavater portatif* boasted a gallery of engravings, some of them in color, and the editor copied or condensed essential works by Lavater, Parenty, and others writers in the genre. The book used a clear how-to approach to teach readers the art and science of physiognomy, but it differed from competing editions in that it chronicled Lavater's life, at times speaking of him in almost hagiographical terms, making him appear as a true "man of feeling." Lavater combined reason and feeling, science and religious sentiment, in equal measure; he constituted an ideal figure that the postrevolutionary period lacked but needed more of.[71]

The editors attributed three qualities to Lavater. Foremost, Lavater displayed an

affecting manner—in all his expressions and gestures—and this manner even extended to the melodious tone of his voice. He embraced his charitable impulses and maintained moral integrity. He lived soberly and worked hard throughout his life. He was devoted to his wife and three children, one of whom became a medical professor and edited his father's posthumous works. However, his sentimental impulses extended beyond his immediate family and instead embraced the whole human community, as seen with how he indulged other people's children or welcomed strangers into his hearth.

More significantly, Lavater embraced new ideas and tolerated other peoples and their values (a point belied by how the editor used ethnic and national stereotypes). Lavater exemplified how enlightened thinkers could maintain personal religious faith, which remained a painful issue in the early 1800s, even after Napoleon reestablished the Catholic church, while still being open to other beliefs. Accordingly, Lavater preached a meliorist and tolerant Calvinism that exemplified what religion could be in an enlightened and politically liberal society. And though Lavater upheld traditional doctrines, he defended unorthodox opinions. He was not anti-Catholic and even fraternized with Jesuits, those usual avatars of dogmatism, factionalism, and intrigue.

This tolerant outlook extended to Lavater's political opinions. Like many European intellectuals, Lavater had first hailed the French Revolution with optimistic fervor and had briefly supported the republican government in 1792. Nonetheless, he soon repudiated Jacobin terrorism and the so-called *directoire helvétique*, a jibe at the materialist and atheistic views attributed to many republican legislators after the Terror. He had also castigated popular violence and warned against the tyranny of the majority.[72]

Nonetheless, Lavater acknowledged that physiognomy was fallible. Like the Swedish naturalist Carl von Linnaeus, the founder of binomial classification, Lavater never claimed that his system could divulge "the original language of Nature." This language belonged to God and thus remained beyond the grasp of human intelligence. That said, people could still use rational and observational methods to probe inner character, even if the human mind remained imperfect. One can never know God's full meaning, but at least one could glimpse portions of it.[73]

Nonetheless, the biographer presented Lavater as possessing almost preternatural powers. He predicted the deaths of children and identified illustrious visitors even before they'd introduced themselves to him, including the writer Louis-Sébastien Mercier and the Austrian emperor Joseph II, the latter who traveled incognito in Switzerland. However, the book also underscored that Lavater always rejected charlatans and swindlers such as Alessandro Cagliostro and Franz Mesmer, with all their rituals and mystical ideas, and he even characterized such figures as "le sûppot de Satan."[74]

In all these books, Lavater gave well-meaning readers the tools to build successful relationships. Science, spiritualism, civic virtue, and domestic happiness—all these qualities could merge in a harmonious package, so long as people kept their hearts open and their eyes focused upon other people's gestures and expressions. Physiognomy laid the soul bare and helped people navigate a society torn asunder by revolution and war.

By early 1800s, readers and editors were appropriating physiognomic principles in unexpected and unusual ways. However, these appropriations worried scientific

professionals, men who wanted to make physiognomy objective and rigorous and who wished to gain status and material reward by doing so. In their opinion, physiognomy demanded serious reflection and should not be left to hack writers and editors eager to profit from credulous readers.

In 1806, Dr. J.-L. Moreau de la Sarthe—just three years after having published his "natural history of women"—returned to Lavater's original *Physiognomische Fragmente*, hoping to provide readers with an accurate translation and a more up-to-date scientific revision. This project turned out to be a significant undertaking. In three years, Moreau de la Sarthe published multiple volumes in multiple formats; the entire edition was re-issued in 1820, and it remained the authoritative version until the 1840s (at which point another revision was undertaken).[75] In so doing, Moreau de la Sarthe redefined Lavater's physiognomy, putting it on new biomedical foundations and moving it into the nineteenth century. This edition framed how literary and scientific writers discussed physiognomy for decades to come, influencing writers from Honoré de Balzac to Gustave Flaubert.

With this edition, Moreau de la Sarthe committed himself to an ambitious publishing enterprise, something akin to the medical series in the *Encyclopédie méthodique* or the *Nouveau dictionnaire d'histoire naturelle* (the former which Moreau de la Sarthe also edited). Lavater's work, he asserted, was highly useful. It had inspired great "interest" and "curiosity" because it had revealed the instinctual and involuntary elements of the "human heart"—"the most hidden secrets and most profound mysteries of thoughts and affections," he wrote.[76]

However, for readers to benefit from Lavater's insights, they needed a reliable edition. The first French translation, which was undertaken in the 1770s, had provided a handsome set of volumes, but the folio size made it too expensive and unwieldy, even for sophisticated readers. Hence, the proliferation of cheaply made and poorly written versions such as *La Physiognomie portative* or *Le Lavater portatif*. In addition, Moreau de la Sarthe regretted the language of the first French edition. The translator was not a native Francophone speaker and thus had failed to capture the stylistic attributes of Lavater's prose. This lack was a shame, said Moreau de la Sarthe, because Lavater was a writer whom people could read, not just to inform themselves, but for sheer literary pleasure, much like J.-J. Rousseau or Bernardin de Saint-Pierre, two other luminaries renowned for their sentimental style.[77]

At the same time, Moreau de la Sarthe insisted that any current edition must repair the serious gaps in Lavater's scientific understanding. It was true, he noted, that Lavater had never intended to write a systematic scientific treatise; Lavater was "neither a physiologist, nor a doctor, nor even a naturalist" and at times he was prone to "enthusiasm," that is to say, credulity and zealotry.[78] These gaps undercut the potential validity of Lavater's work and gave it the veneer of pseudoscience.

To correct these faults, Moreau de la Sarthe added detailed footnotes and clarifications, thereby augmenting the scientific foundations of the text. He added the new anatomical work on the human face as developed by Peter Camper, the important anthropological theories about race and climate pioneered by Johann Friedrich Blumenbach, recent physiological discoveries about the human passions and emotional

response, aesthetic approaches to expression and gesture developed by Denis Diderot in his *Salons*, controversial phrenological ideas about skull shape and localized brain function as explained by Franz Joseph Gall and Johann Gaspar Spurzheim (and which had electrified Parisian intellectual circles), comparative studies on physical expression in the human and animal world, and artistic theories of form and caricature as explained by critics as diverse as J.-J. Winckelmann and William Hogarth. In short, Moreau de la Sarthe promised to modernize Lavater's work entirely, bringing it in line with the biomedical and philosophical advancements of the early 1800s.

To bring this undertaking to fruition, Moreau de la Sarthe unveiled this project in a lavish prospectus—published by none other than Louis Prudhomme, the travelogue and politician encountered earlier in this chapter—and scheduled to sell the book by subscription. This was a common publishing tactic, something pioneered with Diderot and d'Alembert's *Encyclopédie* and which had continued, on an even grander scale, with the *Encyclopédie méthodique*, which comprised almost 200 volumes. Moreau de la Sarthe anticipated that his new Lavater edition would run eight volumes—roughly 3,500 pages in total and replete with high-quality engraved illustrations—with two volumes of it appearing each month. In the end, the book involved several additional volumes, all appearing at different times, and would take almost three years to finish.

Above all, Moreau de la Sarthe promised that his edition would guide readers through the maze of Lavater's writings and teach them the art and science of physiognomy. He insisted that a person learned physiognomy neither through rote nor rational means. Rather, one grasped it by combining experience with intuition and by practicing with examples. Physiognomy was a secret language that the sympathetic observer must first recognize and then learn to speak. Only through this means could someone begin to read the soul in another person's expressions and gestures. At the same time, Moreau de la Sarthe wanted to distinguish physiognomy from occult or mystical ideas as associated with Mesmer and Cagliostro,[79] and he identified himself, as he had elsewhere, with the materialist and skeptical empiricism advocated by the Idéologue circle of philosophers and scientists.[80]

To attain these pedagogical goals, as well as to make his edition more visually pleasing, Moreau de la Sarthe planned to provide readers with over five hundred engraved images, many of them in color. These illustrations were of the highest quality, both in execution as well as in technological reproduction. To make sure the book looked beautiful, Moreau de la Sarthe commissioned the young and promising physician-artist Jean-Galbert Salvage—we will analyze his other work in chapter 6—who had made a name for himself within Parisian art circles with his brilliant but unorthodox anatomical molds of classical statues. Salvage's illustrations were, in turn, adjudicated by the painter François-André Vincent, another prominent figure at the Institut National.

Not surprisingly, given his interests, Moreau de la Sarthe announced that he would include a special section on female physiognomy, and he appealed to his status as an authority on women's biological and moral nature. The book would also include many engraved images of illustrious women and noted feminine types. One figure, in particular, elicited his interest: the character Clarissa from Samuel Richardson's famous sentimental novel of the same name.[81]

According to Moreau de la Sarthe, the book would teach readers to develop physiognomic skills: first by studying image and text together and then going out and applying these skills in real-world encounters in daily life. The new urban environment, which had been transformed by the French Revolution, had turned cities such as Paris into a living laboratory in which the aspiring physiognomist could ply their trade. This truth emerged when readers studied the expressions and mannerisms of the lower-class people who thronged the streets of Paris. Like Mercier and Meisner (but decades before Charles Baudelaire), Moreau de la Sarthe extolled the pleasures of being an urban *flâneur*. He encouraged his readers to visit public spaces such as markets, theaters, hospitals, and even prisons. Such interactions, he insisted, had deepened his physiognomic skills; readers should also leave bourgeois comforts and immerse themselves in the popular life of the streets. Here, observers encountered people who could neither control nor contain their emotional life; nothing impeded their bodily functions, and so nothing could be concealed or refined. According to him, it was in these crude and violent displays of the city's popular classes, the so-called *menu peuple*, that the aspiring physiognomist could understand how penchants and passions animated facial expression and gesture.[82]

By the first decade of the nineteenth century, Lavater's *Physiognomische Fragmente* had become an open-ended work, one that was constantly being revised and reinterpreted by medical and lay writers. Authors and editors revised Lavater's writings and reshaped them for their own intellectual purposes and agendas. In this process, Lavater's works condensed complex and contrary ideas about self and society, while all along promising important insights through which readers could understand the changing social world of postrevolutionary France.

Herein lies the importance of physiognomy. In sometimes bewildering ways, it encompassed different assumptions about the world, especially in how it balanced the tensions between faith and science. One the one hand, physiognomy suggested that some underlying soul or vital principal animated the body and determined expression and gesture, placating those readers and practitioners who upheld religious or spiritualist beliefs. It also suggested, on the other hand, that materialist factors, both innate and environmental, shaped self and character, whether with heredity, embryology, health, education, or climate. At the same time, it balanced incommensurate claims about scientific rationality and calculation as well as those involving sensibility, intuition, and individual genius. Physiognomy did not so much hedge bets on human nature; it suggested that multiple views were potentially valid.

Overall, physiognomists stressed that the self was a dynamic and irreducibly complex entity. One found vast differences between people, that was a given, but one never knew for sure what to make of these differences or how to assess them accurately. The self appeared too slippery, too shadowy and so observers were often confused about the kinds of characters with whom they were dealing. Physiognomy acknowledged this rich diversity but then embodied a strong urge to put people into clear categories, pinning them down like specimens in an entomological collection. It tapped into deep-seated anxieties about shady pasts and present uncertainties: uncertainties about privilege, estate, and title; new forms of wealth, property, and authority; changing rights and duties

accorded to men, women, and children; and ambivalence toward those who had survived or profited from violent political change. Above all, physiognomy addressed unpleasant political memories and confusion about class and ownership in the towns and cities.

However, physiognomic inquiry, like the natural history of women, was connected to new democratic impulses and how these impulses were changing broader cultural insignia and meaning. Lavater and his followers took what was once a courtly form of knowledge—how to divine thoughts and agendas within the theater-like, hermeneutic world of aristocratic society—and then *democratized* it. They proclaimed that every person, irrespective of birth, gender, and rank, held an inner sensibility and moral character, an individual dignity worthy of contemplation and interpretation.

Hence, any person could become a physiognomist, not just the noble or the rich or the powerful. This belief parallels the democratic ideas advanced by J.-J. Rousseau and Immanuel Kant, who had held that each individual constituted a moral being and deserved personal dignity and rights. All people could claim this moral autonomy, using physiognomy to make sense of their fellow citizens in the modern democratic age. The ever-sprawling physiognomical genre thus encapsulated the powerful urge, among the educated and leisured classes, to take biomedical science and combine it with whatever other intellectual trends at hand, so they could better understand the shifting realities of postrevolutionary France. In the next chapter, we will see how medical writers could take these impulses and map them out to more targeted constituencies, appealing more directly to particular readers and specific value systems.

CHAPTER 5

Sex and the Citizen

Reproductive Manuals and Fashionable Readers under the Napoleonic State

In the early years of the Napoleonic regime, following the budding flow of physiognomic texts, another craze hit Paris high society: a vogue for self-help manuals that taught readers the art of having gifted, healthy, and beautiful children —preferably boys. This best-seller genre included the anonymous *De la Propagation du genre humain, ou manuel indispensable pour ceux qui veulent avoir de beaux enfants de l'un ou l'autre sexe* (1799), J.-A. Millot's *L'Art de procréer les sexes à volonté, ou Système complet de génération* (1800), L.-J.-M. Robert's *Essai sur la mégalantropogénésie, ou l'art de faire des enfants d'esprit, qui deviennent des grands hommes* (1801), J.-J. Virey's *De l'Éducation publique et privée des français* (1802), and A. G*** de B.S.O.'s *La Philopédie, ou avis aux époux sur l'art d'avoir des enfans sans passions* (1808).[1] Some journalists hailed this bizarre corpus as a publishing event unto itself, and the books were widely debated in the literary and popular press. As one critic complained, with tongue perhaps planted in cheek, "Paris is truly a fertile source of new inventions."[2]

This literature departed from earlier medical and lay writings about sex and family hygiene.[3] Before 1789, French doctors usually wrote about sex in two ways: either they informed readers about sexual mechanics and self-help methods, or they warned against libertinism and self-pollution and thus sought to change moral behavior. Like other domestic manuals, these books were meant to be read and to be used (to borrow Charles

Rosenberg's phrase)—though, as several historians have cautioned, we know little about how people understood such books, much less used them in their daily lives.[4]

The sex manual craze of the postrevolutionary years opens a different view upon this process of diffusion. The interplay between genre and subcultures suggests a complex and confused dialogue between doctors and their readers, as both groups used this medical genre to capitalize upon political and professional agendas. Here, doctors now told readers that they could use sex and domestic hygiene to attain specific ideological agendas and not just reinforce more general standards of morality. Sex and child raising, they wrote, could become self-conscious political acts. In so doing, doctors tailored these books for an engaged readership, teaching targeted groups on how to use medical knowledge about reproduction and heredity to help them raise their children with particular political and moral values. At the same time, these doctors—all who stood on the margins of the Paris medical establishment—also used this sex manual genre to advance their own professional and ideological agendas, hoping to use their books not just for profit but to align themselves with possible patrons and political networks. Sex, medicine, politics, and interest, as we shall see, combined in unstable and unusual ways. These doctors entered into a dialogue with particular constituencies of readers and toyed with official ideologies about moral values and sexual difference. Seen in this light, medicine could mediate disparate interests, helping shape—and respond to—the wide range of mentalities in postrevolutionary life.

These postrevolutionary sex writings developed from an earlier tradition. Starting in the seventeenth century, large numbers of sex books rolled off the printing presses in England, North America, Holland, France, and the German-speaking states. These works ranged from medical advice like Nicolas Venette's *Tableau de l'amour conjugale* (1685) to popular treatises like *Aristotle's Master-Piece* (1690) or *The Admirable Secrets of Albert the Great* (1722), verse poetry like Claude Quillet's *Callipaedia* (1655), and a whole range of erotic, smutty, and obscene books written by the Grub Street hacks.[5] A number of these works, like Venette's *L'Amour conjugale* and *Aristotle's Master-Piece*, continued to appear well into the nineteenth century.

The tone of these books needs emphasis. In *L'Amour conjugale*, Venette provided his readers with all sorts of practical advice about conception: how to tell whether a woman was a virgin or whether she was pregnant, how to cure sterility, and whether female orgasm mattered. As a writer steeped in Renaissance humanism, Venette thought that readers could use their knowledge of nature to control sex and fertility. Significantly, he did not see sex problems as issues reflecting personal identity or mental inhibitions (sex problems, for him, were always mechanical problems in the physical body), and he celebrated marriage and childbearing without pushing an explicit theological or political agenda.[6]

This earthy approach in sex manuals contrasts with a new literature that began to appear in France during the 1750s, some of which have already been encountered in our discussion of the Marquis de Sade. Written mostly by doctors, these books denounced libertinism and luxury among the upper classes and promised that hygienic regimen could reform debauched manners and morals. Deep-seated anxieties about population

decline and France's standing in the international arena helped drive this medical activism. Among the upper classes, said moral critics, sexual free living, philosophic skepticism, and consumerism had caused nervous degeneracy and thus infertility. To cure these problems, as seen in chapter 1, prominent medical crusaders—such as Antoine Le Camus, Charles Vandermonde, and Samuel-Auguste Tissot—proposed systems of moral hygiene in which "high risk" groups (usually fashionable women) could learn family values and self-restraint.[7] In particular, these doctors stressed that the family could regenerate moral values because it provided a healthy and natural environment to nurture and socialize the individual. Though official taste still supported this medical ideology—look at the writings of Pierre Cabanis—these ideas could also clash with the cynicism, hedonism, and crass materialism associated with post-Terror elites, who had turned from the forced conviviality of Jacobin virtue and republicanism to more intimate and private pursuits under the Directorial republic.[8] As a result, doctors balanced official moralism and the perceived tastes of the reading public, especially with what were thought to be their freewheeling and roué attitudes. In the end, these medical writers created books that mixed, in bizarre and sometimes shocking ways, a whole set of contrary impulses: sexual know-how, patriotism, and family values.

Within this setting, *De la Propagation du genre humain* was first published in 1799 (fig. 5.1). The book advertised itself as an "indispensable manual for those who wanted beautiful children" and promised to teach parents how to conceive male or female babies at will.[9] This text, like others that would appear in this genre and guise, was derivative. The author plagiarized large sections of Quillet's *Callipaedia*, attached Johann Heinrich Meilbron's notorious piece on flagellation (which had been translated two years before), and included two pieces by Julien Offray de La Mettrie, *The Art of Gambling* and *Man a Plant*, the latter of which had been banned under the Old Regime.[10] The book also discussed sex and astrology, conveniently updating the zodiac to reflect the new revolutionary calendar. Overall, the author assumed that his buying public wanted to learn about conception, not erotica, and he thus took sex as a physical, not a psychological issue. Largely addressed to men, the book offered topical "know how" advice about sexual timing, diet, wine selection, orgasm, impotence, sterility, phimosis, and genital size, and it offered solutions that ranged from surgery for women to bizarre mechanical contraptions and cataplasms for men. These included bored-cork planks that could ease discomforts attributed to penis length and girth.

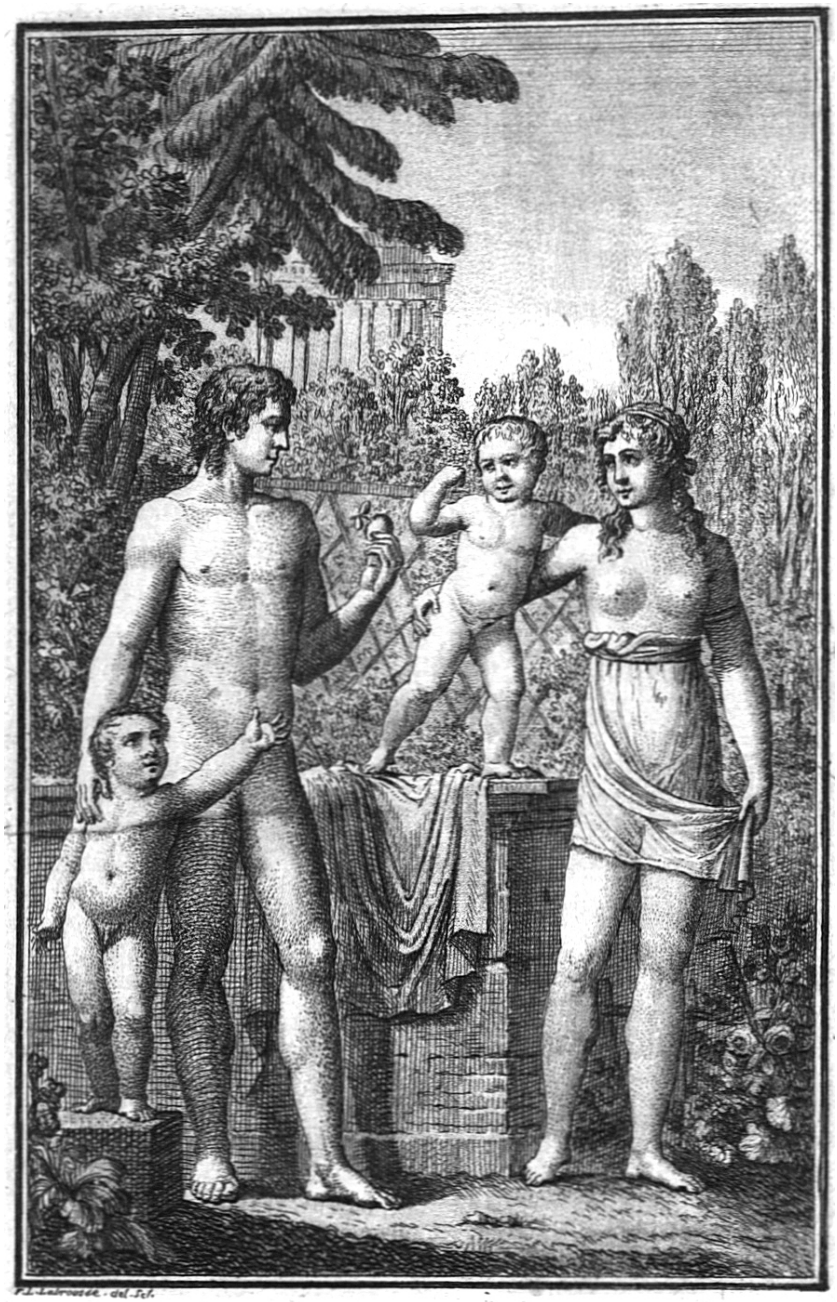


Fig. 5.1. Frontispiece from *De la Propagation du genre humain, ou manuel indispensable pour ceux qui veulent avoir de beaux enfants de l'un ou l'autre sexe* (Paris, Year VII [1799]). Bibliothèque Interuniversitaire de Santé, Paris. The image presents the new Eden, medically bred along neoclassical ideals.

On the surface, then, *De la Propagation du genre humain* fit into the traditional corpus of sex writings (not least because it plagiarized them), but it emphasized two things that made it novel on the self-help market: first, the book advertised how to conceive boy children; and second, it connected sex and domestic hygiene with revolutionary regeneration. This fad for having boys—and *De la Propagation du genre humain* was not the last word on this subject—is striking. Since the counter-Reformation, moralists had cautioned parents against having girls, although women were clearly needed to propagate the species. Girls, they said, were an emotional and financial drain on the family: emotional, because girls were jealous and fickle and caused all sorts of discord and mischief; financial, because girls could not assume a lucrative trade and their dowries emptied the family purse.[11]

The French Revolution introduced two new factors in the boy craze. The first was military. By 1799, France had experienced seven years of civil and foreign war, and although French armies were on the offensive, the demographic losses weighed upon the public mind. Many observers recognized that the nation needed to replace a lost generation of men (not least for future wars, if necessary).

The second factor was cultural. The French Revolution created a cult of male virtue, public life, and beauty that informed official taste and iconography, especially with neoclassical paintings and sculpture.[12] Given this emphasis on masculine prerogative and sociability, mothers and fathers perhaps concluded that only male children could benefit from this new world of careers open to talent. This belief later appears in Gustave Flaubert's *Madame Bovary*, where the protagonist Emma mourns the birth of her daughter because she too will stay disadvantaged in French society. She thought: "a male child was like an anticipated revenge for the powerlessness of her past. A man, at least, is free."[13]

Beyond these sexual concerns, moral politics also entered this book. As legislators preached, procreation was a patriotic duty. According to the author, the Old Regime had suffered from degeneracy and depopulation, but the Revolution had aroused patriotic sentiment and made people think about their domestic duties. His book, he said, would appeal to these upstanding citizens. As he warned, ill-advised marriages bred sickly children, who were incapable of fulfilling their moral and civic responsibilities. For these reasons, prospective partners should avoid mates with gout, epilepsy, and melancholic or consumptive temperaments. In particular, older men should not marry young women because these unions were sterile or at best produced degenerate children.

In other instances, female "negligence and imprudence" caused physical degeneration. Pregnant women should thus exercise and avoid "violent movements" (like dancing); moreover, women should keep their emotional life under control, because the maternal imagination—a powerful force in reproduction and growth—caused monstrous births.[14]

The moral didacticism aside, the author spiced up his text. He was subversive and titillating: the book broached taboo subjects like occultism, flagellation, and philosophic materialism in a tradition that harked back to mid-Enlightenment pornography like *Thérèse philosophe* and *Dom Bougre*.[15] Throughout, the author assumed that his readers engaged in non-procreative sex for carnal self-satisfaction, and spoke about men and women as though they were both libidinous and sexually indulgent by nature. When a

couple hoped to conceive, however, different rules applied. As he said, men and women should become less physical in their lovemaking; frenzied passion, for example, dissipated the vital energy needed for procreation (note that he did not see women as frigid or passive).

However, *De la Propagation du genre humain* also treated male sexuality as a universal norm. For example, the author insisted that women's sexual needs were "without measure and without order" and caused diseases like hysteria and nymphomania. He then went on to tell readers that men felt greater physical pleasure because their genitals were more sensible, thereby characterizing female sexuality as defined by some essential lack.

Despite these disparaging remarks, the author wished to placate both his male and female readers: a healthy sex life, he said, promoted personal happiness, well-bred children, and good family life. The couple should change their sexual behavior only when they wanted to conceive.[16] Overall, then, *De la Propagation du genre humain* fits into an entire genre of post-Terror writings that dealt with mesmerism, magical medicine, and eroticism, such as Dr. François-Amédée Doppet's successful writings on occult healing and the therapeutic value of the whip—an entire genre and subculture itself that will be explored in chapter 7.[17]

De la Propagation du genre humain set the stage for Jacques-André Millot's *L'Art de procréer les sexes à volonté, ou Système complet de génération* (1800). *L'Art de procréer* was Millot's first self-help book, and although he penned three others, none of them achieved the same success or notoriety of his first one, which had undergone six editions by 1828.[18] Before the French Revolution, Millot (fig. 5.2) had been a respected doctor in Paris high society. He had delivered babies for Marie Antoinette and the Duchess of Orléans; he was personal physician to the Comte d'Artois (the future Charles X), and he saved the newborn duc d'Enghein from a nursery disaster.[19] Because of these past aristocratic associations, Millot lost everything during the Reign of Terror, and he later squabbled with the republican doctors at the new Paris clinics. A former insider had been reduced to practicing on the periphery. For a time, he still wrote about his particular expertise in obstetrics and pediatrics, publishing studies on caesareans and vaccination. Frustrated by poverty and professional neglect, he turned to writing pulp medical books on sex and domestic hygiene, which allowed him to vent his professional, political, and religious conservatism (views that his readers may have also shared). In these works, Millot denounced the Jacobin and Directorial republics as a pack of murderers and thieves, he praised Napoleon Bonaparte for restoring order and morality, and he attacked the Paris medical faculty for its philosophic skepticism, materialism, and cliquishness.

His conservatism notwithstanding, Millot understood that sex sells, and he tailored his books to suit the lifestyle, political sensibilities, and sexual needs of new Consulate elites. One bookseller who called the book "crazy, extravagant, and immoral" still admired the fact that it had sold over a thousand copies.[20] To his first self-help book, Millot brought a gallant wit; sly discussions of hermaphrodites, monsters, and sterility; and even testimonials from satisfied female patients. As his main sales pitch, Millot promised to teach readers the proper way to conceive boys. "Everyone knows how to make babies," he said, "but no one knows how to conceive a boy or a girl at will."[21] For his part, Millot

argued that the ovaries contained the preformed germs of young boys and girls: boys on the right, girls on the left. Depending upon which ovary the male's semen permeated, a child of one or the other sex would result (fig. 5.3).

However, the process was tricky. Following naturalist Lazzaro Spallanzani, Millot argued that the male semen had a spirituous quality—an *aura seminalis*—that caused it to permeate the womb, rather like a miasma spreading in a dense thicket. During coitus, therefore, the man should lean on his partner's left side; at the moment of climax, he should gently reach down and pull up the woman's right buttock—making an angle of twenty-five or thirty degrees—so the *aura seminalis* could permeate the proper ovary. While Millot recommended the missionary position, he claimed that partners could use this technique no matter what their preferred sexual positions may be; the man simply had to adjust the woman's right buttock and discharge his "life canon" [*canon de la vie*] at the proper angle.[22] Like *De la Propagation du genre humain*, then, Millot assumed his readers practiced both procreative and recreational sex, but he seemed forced to remind them that they should have vaginal sex when they wanted to conceive; in veiled terms, Millot was possibly alluding to non-procreative sexual activities, including sodomy.[23]

At first glance, Millot was not novel. For example, Nicolas Venette's *L'Amour conjugal* and Michel Procope-Couteau's *L'Art de faire des garçons* (1750) had debated similar sexual techniques; and *De la Propagation du genre humain* had covered the same problem just two years before and may have inspired Millot's book.[24] However, Millot is different. In these earlier books, writers discussed generation in an ancillary fashion, either as a means to indulge the reader's curiosity or give the books a scientific veneer. By contrast, Millot opened by discussing generation theory and this discussion consumed three-quarters of his 400-page work (unlike Venette, who opened his book by describing the male genitalia in graphic terms, surely a more effective attention-getting device). At the same time, Millot attacked the new obstetric curriculum at the Paris clinics, lashing out at prominent doctors such as J.-L. Baudelocque.[25]

Jacques André Millot,
de l'Académie de Chirurgie; Accoucheur des
ci-devant Princesses de France; membre de
plusieurs Sociétés Savantes.

FIG. 5.2. Portrait of Jacques-André Millot (1738–1811) (19e siècle) (s.d.). Code: anmpx22x2318. Bibliothèque Interuniversitaire de Santé, Paris. Millot's success suggests how medical writers could craft books intended to exploit particular readerships and political constituencies.

More than vulgarization was going on here. Recall that Millot, the former court

physician, lacked a formal academic appointment in the 1790s, a professional embarrassment accentuated by his financial distress. Millot perhaps hoped his book would create a demand for his medical services among Consulate high society, or even improve his professional status by showcasing a rival embryological system. In this sense, Millot may have imitated Pierre Maupertuis's *Vénus physique*, which had used a gallant dialogue to make sophisticated arguments about generation theory.[26] At least one critic took Millot seriously on this point.[27] By promoting a professional agenda in a self-help book, however, Millot took a calculated risk because well-respected doctors like Philippe Pinel had begun criticizing medical popularizers in explicit terms, including known figures such as William Buchan and Samuel-Auguste Tissot.[28]

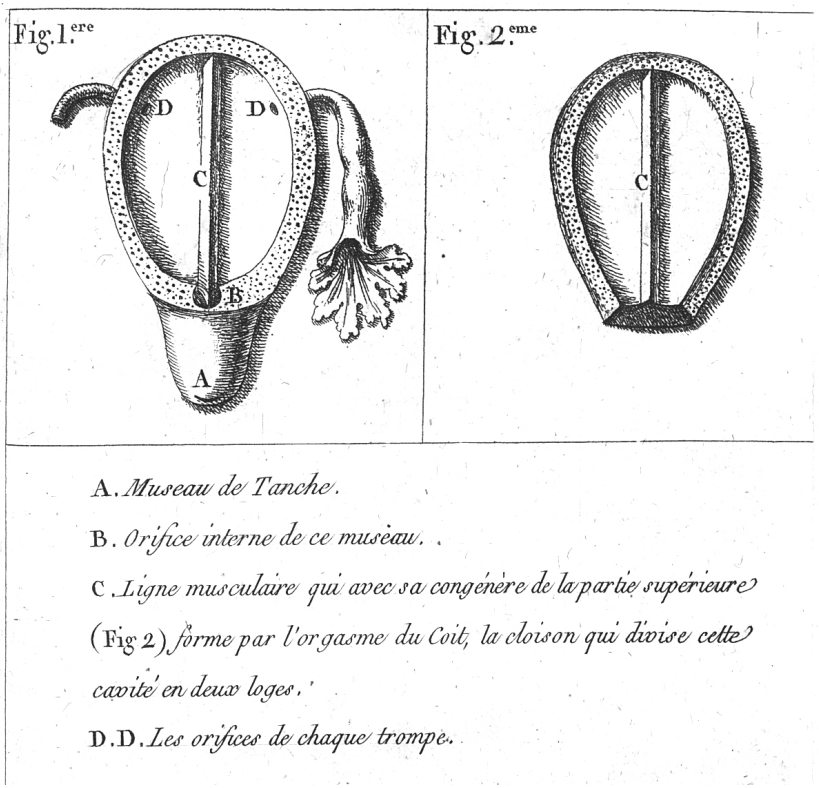


Fig. 1.ere
D
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Fig. 2.eme
C
A. Museau de Tanche.
B. Orifice interne de ce museau.
C. Ligne musculaire qui avec sa congénère de la partie supérieure (Fig 2) forme par l'orgasme du Coit, la cloison qui divise cette cavité en deux loges.
D.D. Les orifices de chaque trompe.

Fig. 5.3. Plate from Jacques-André Millot, *L'Art de procréer les sexes à volonté* (Paris: Migneret, 1807). Code: 073942x8. Bibliothèque Interuniversitaire de Santé, Paris. Millot wanted to show how the uterus divided itself during orgasm and directed the seminal spirits into the Fallopian tubes.

In this book, Millot argued for ovist preexistence. His ideas constituted part of a more significant medical discussion in France. In the great debates between epigenesis, preformation, and preexistence, historians often portray the shift toward epigenesis

beginning in the 1740s and 1750s—despite resistance from Charles Bonnet, Albrecht von Haller, and Lazzaro Spallanzani—with epigenesis largely triumphing in scientific circles by 1800. The Marquis de Sade, as we have seen, had also engaged these debates after 1794, but had espoused a peculiarly animalculist theory.

In post-Terror France, however, the medical faculties largely rejected epigenesis. By the 1790s, Spallanzani's experiments on animal reproductions in frogs, toads, salamanders, silkworms, snails, and dogs—later confirmed by Pierre Rossi in Pisa and John Hunter in London—caused many doctors to return to Haller's and Bonnet's theories of ovist preexistence.[29] These physicians praised Spallanzani's experiments as "one the most precious discoveries ever made upon Earth," and then tried to inseminate human couples artificially.[30]

In 1803, for example, Michel-Augustin Thouret, a professor at the Paris medical school, announced that he had impregnated a twenty-four-year-old woman by "purely mechanical means." With explicit detail, Thouret reported how the husband had manually stimulated his wife, ejaculated into a syringe, and then injected his semen into her vaginal canal. With help from a doctor, the couple repeated these experiences every two weeks before the woman successfully conceived and gave birth to a child who resembled both parents. Following this "great and important experiment," Thouret promised doctors could now cure all impediments or "vices" that "opposed the consummation of the conjugal act."[31]

Millot was hoping to contribute to this discussion about ovist preexistence or at least register his opinions on the matter. Millot repudiated epigenetic theory and argued that reproduction was not an open-ended process. As he explained, "Generation does not suppose the production of new [organic] parts; it is only a new modification of already-existing elements."[32] Nature endlessly created new individuals but still conserved the species: variation occurred without evolution. However, Millot rejected Bonnet's strict encasement theory. Doubting that the womb contained all these encased germs, he instead suggested that the ovaries formed embryonic germs throughout the female life course (a process called "germification") and only the male seminal fluid could cause these embryos to grow into a full individual.[33] For these reasons, he also went on to dismiss that hermaphroditism and parthenogenesis could occur in humans (that is, when an unfertilized egg cell developed into a fully formed individual). Satiric writings like Abraham Johnson's [Henry Hill's] *Lucina sine concubitu* and Richard Roe's *Concubitus sine Lucina* (1750) had explored this possibility.[34] Lest readers take these theories seriously, Millot told them that only two sexes existed—one for each ovary—and only a large amount of semen could inseminate both ovaries and produce twins. In his survey, therefore, he tried to bridge epigenesis and preformation; he kept the ovist model but acknowledged the obvious epigenetic inference that children inherited material qualities from both parents. In his eyes, his theory of ovist preexistence, which stressed germ formation and a "mode of aggregation" between sexual partners, was more likely than "that famous preexistence since the creation of our world."[35]

A large corpus of historiography has shown that religious and philosophic belief often informed generation theory, causing naturalists to embrace either the deterministic preformation theory, as with Calvinist predestination, or the more open-ended

epigenesis, as with Catholic belief in freewill and good works.[36] However, during the French Revolution, it is important to emphasize that new political ideologies replaced philosophy and theology as an influence upon generation theory. Millot demonstrates this trend. When discussing reproduction, Millot addressed a reading audience who valued the political gains provided by the French Revolution and who still wanted to create a regenerated "New Man" for the French nation.[37] While somewhat sympathetic, Millot seemed to tell his readers that they might want to lower their expectations. As the embryological evidence suggested, preformed embryos could not inherit much in terms of genius or work ethic; when children received anything from their parents, it seemed limited to negative traits like anomalies, sicknesses, and mental debilities. Talent was thus innate, forming a neo-Kantian "sixth sense"—"a natural inequality in physical and intellectual faculties among men." Education could not overcome these born inequalities. For these reasons, Millot doubted whether public instruction could transform morals and manners and he indirectly criticized philosophes like Condorcet, who believed that future generations could inherit progressive adaptations.

However, Millot maintained some dreams of regeneration and improving society. Like the Idéologue philosophers, Millot promised the family could inculcate morality and civic virtue. In this case, parents, doctors, and educators should combine pedagogy and sexual hygiene to improve society. Given social limitations, though, citizens faced a stark choice: they could reform the present generation or focus upon the yet unborn.[38]

Other doctors were more enthusiastic about the potential of human breeding and social improvement. The following year, J.-L.-M. Robert, a young medical student from Sainte Tulle, entered the self-help sex market with his short book, *Essai sur la mégalantropogénésie, ou l'art de faire des enfants d'esprit, qui deviennent des grands homme* (1801).[39] Dedicating his book to the Institut National, Robert hoped to teach readers and administrators how to make people healthy in body and spirit and thus promote population growth. Quite simply, Robert promised how to breed "great men" [*grands hommes*] in the neoclassical style, suggesting that citizens could make France into a living Pantheon.[40] Beyond his opening essay—original if not bizarre—Robert was crassly derivative, plagiarizing large sections of Millot's *L'Art de procréer* and adding chapters from the first edition of Johann Kaspar Lavater's *Physiognomische Fragmente* (1781–1787). For these reasons, some reviewers confused Millot and Robert or wondered whether they were conspiring together to play an elaborate hoax upon Paris high society. But the reality was that both Robert and his editors had put their finger upon an issue that the reading public found at least intriguing and perhaps even necessary.

According to Robert, the government and the people must work together to breed a future race of great republican citizens. The revolution had inspired citizens to regenerate themselves; the government must now take this political capital and invest it in the next generation. To perfect the human race, education was the first step; it liberated people from ignorance and superstition and imparted the abstract values of liberty, equality, and fraternity. Yet more than education was needed. Robert rejected the philosopher C.-A. Helvétius's radical ideas about education and environment—which constituted a form of extreme behavioralism—and instead he claimed that biology made human destiny.[41] Individuals, he concluded, could only do so much with the bodies and

brains that they had received at birth.

That said, all hope was not lost for legislators and good citizens. As Robert thought, geniuses were born and then refined; when forming bright minds and beautiful bodies, good pedigree and good schooling went hand in hand. And Robert promised to make such people. "Mega-anthropogenesis," he bragged, could breed a great race of republicans by educating the French people and then marrying the best and brightest men and women to each other. In contrast to Condorcet and Cabanis, who tried to convince legislators that biological engineering could perfect humanity, Robert marketed these utopian projects to a broad reading public. Through their private sex lives, ordinary readers could breed the "New Atlantis" in the revolutionary present.

Robert proposed what he considered, at least, to be a straightforward plan. He argued that the Consulate should create two primary schools, or Atheneums, for regenerating citizens. The first one was for men at the Paris military school, and the other was for women at the palace of Versailles. Admittance would be based upon the physiognomic profiling as outlined in Lavater's *Fragmente* (which Robert or his editor then took wholescale from previous editions of Lavater's work). In these Atheneums, both boys and girls would acquire extensive learning through a rigorous curriculum steeped in science, mathematics, civics, and classical values. After students had passed comprehensive examinations, and had been ranked by the interior ministry, they would then be married to one another, and the women would even receive a state pension based upon their intellectual merit. In this fanciful plan, Napoleon Bonaparte would himself preside over the marriage ceremonies, making them into an essential part of the annual festival of the republic, and the top six couples would even receive distinctions to honor their mental acumen and physical prowess.[42]

Like Millot, Robert found an audience. In response, Robert published a brief synopsis, defended a medical thesis on this subject (directed by obstetrician Alphonse Leroy), and soon issued a substantially revised edition. The book was also translated into German.[43] Not surprisingly, Robert also attracted dismissive and angry critics. In a poor move, Robert used his own characterization as an epigraph—"my century might call me crazy"—and hostile reviewers were only too happy to agree. One anonymous critic said that Robert's plagiarism taught readers not the art of making children but rather the art of making books (*"c'est un faiseur de livres faits"*); another quipped that Robert's parents should have learned "mega-anthropogenesis" before they themselves had conceived children.[44] In 1807, the Théâtre de Vaudeville performed a one-act satire called *L'Isle de la mégalantropogénésie*. The play staged an overrefined "world turned upside-down" in which inbred social elites had forgotten how to work.[45] The play was so successful that theater companies imported it to northern Italy, where translators replaced French caricatures (like a gastronomer) with Italian objects of ridicule (like a politician).[46]

Robert hit a nerve. Unlike *De la Propagation du genre humain* or Millot's *L'Art de procréer*, Robert identified himself with the "principles of 1789" and he claimed the French Revolution had regenerated the nation and improved its health and physical and moral well-being. In so doing, Robert plunged into a medical debate about the health consequences of the French Revolution, one in which political commitments and personal memories often shaped the views of doctors and surgeons. As seen in chapter 1,

these ideas took various guises: for conservatives like J.-A. Alibert, the French Revolution had destroyed self-control, political order, and, ultimately, personal health; meanwhile, more moderate or centrist doctors like M.-A. Petit believed that freedom and patriotic virtue had revivified a moribund population, though Jacobinism and popular violence had often obscured the revolution's healthy benefits. In mixed ways, Petit followed Idéologues like Cabanis and Pinel, who believed that the revolution could improve both medicine and social well-being, so long as extremists were kept at bay.[47]

In his writings, Robert made it clear that he supported the political and clinical program of the Idéologue doctors and set himself in the circle of moderate republicans and more secular materialist philosophy.[48] And, like Marc-Antoine Petit and J.-L. Alibert, he tackled the question on the relation between health and the French Revolution itself, even publishing a two-volume study of the subject in 1802. Unlike many writers, whom he claimed were overwrought by "the memory of old injustices" and thus heaped insults upon the revolutionary experience, he wanted to emphasize the Revolution's positive aspects. Although Robert professed an open hostility to Jacobinism, he still believed that the French Revolution, taken in its whole sweep, had rejuvenated the nation's health and thus its fertility—and fertility, as Robert quoted Lucien Bonaparte, was the mother of all victory, the safeguard of liberty. Using familiar revolutionary iconography, Robert claimed that freedom and medical reform had made "every Frenchman [into] a Hercules, so great is the influence of the spirit of liberty on the population."[49] Still, the government had more work to do—such as prenuptial marriage checks, midwifery regulations, breast-feeding, and so on—in order to improve the nation's health.

Despite these sympathies, Robert cautioned against radical social engineering. Following Cabanis and Bichat, Robert believed that inequality had a biological basis; people could not improve themselves beyond their born abilities. Social engineering was therefore ineffective, while selective breeding could potentially improve society. Though perfection was an instinct, human nature could not be changed in full, and governments should emphasize, in equal doses, the duties and responsibilities that came along with political liberty.[50]

At the same time, Robert advocated striking ideas about female education and emancipation and his opinions here distinguished him from the group of doctors and writers holding forth on the "natural history of women." For many doctors and legislators, ovist preexistence suggested that women failed to contribute to conception; rather, they were simply passive receptacles for the animating male semen. At the same time, however, ovist preexistence also showed that the child's physical well-being was first and foremost a maternal duty. As doctors explained, women contained the preexisting germs of all future citizens in their wombs; their blood nourished the fetus, molding its temperament and passions; the maternal imagination influenced gestation and could cause anomalies; and breast-feeding transmitted vice and virtue. Because of these maternal influences, doctors like Pierre Cabanis and J.-L. Moreau de la Sarthe had concluded that women should forget intellectual or public life and instead focus upon their natural domestic duties, as seen in chapter 3. Millot shared their sentiments, although he still tried to placate female readers.[51]

By contrast, Robert drew different conclusions from embryological science.[52] To

breed a regenerated New Man, he argued, the republic must first create a great woman of spirit as well. Robert criticized the government for failing to educate women, and he even implied that legislators kept women ignorant and subdued out of cynical calculation. According to him, women were not physically and morally inferior; instead, they possessed many sublime qualities, which included wit, sentiment, virtue, and intelligence. His mega-anthropogenetic Atheneums, he thought, could cultivate these innate faculties and thus promote regeneration. By refining their minds and bodies, doctors and educators could make women into better wives and mothers. Most importantly, children inherited these acquired qualities, thus internalizing progress in their bodies.[53] Not surprisingly, some critics alleged that only women bought Robert's books—and Robert often returned to topics relating to women's health, ranging from breast cancer to music therapy.[54]

Robert may have made a great splash in the popular press, but political pressures were already beginning to change the market for sexual self-help books and writers soon assumed a different tone in their books. Starting in 1801, two years after Napoleon's coup d'état, the Consulate became more authoritarian and militaristic. That same year, after reconciling the French government and the papacy in the Concordat, Napoleon began looking to religious authority to help maintain social control and consolidate the power of his regime. Earlier in 1800, the government also adopted new censorship laws, and the revolutionary book trade soon experienced severe financial difficulties.[55] As if taking their cue, sex writers adopted a more conservative tone and explicitly rejected what they saw to be Millot's flamboyance or Robert's radicalism. In his later books on sexual hygiene, for example, Millot himself became more focused upon conservative family values and domestic authority, putting greater power into the hands of fathers, and losing the clever wit and saucy qualities of his first manual (figs. 5.4 and 5.5).

Not surprisingly, this more paternalistic and restrained outlook emerges in J.-J. Virey's *De l'Éducation publique et privée des français* (1802). We've already encountered his ideas about gender, sexuality, and medicine in his writings on the natural history of women. Steeped in the Rousseauian primitivism associated with writers such as Bernardin de St. Pierre and L. S. Mercier, Virey thought that education should create "honest and virtuous men," not Robert's "great men" or intellectuals [*savans*].[56] His ideological differences with Robert notwithstanding, Virey still believed that citizens could breed virtuous citizens and thus make "a new Utopia in which everyone will be perfectly happy and content."[57] Throughout, Virey emphasized the limits of regeneration, and he rejected women's education outright.[58] His approach was unique. Here as elsewhere, Virey distinguished between the organism's cerebral and genital poles, claiming that people needed to balance both to experience normal biological functions (including mental aptitude and fertility). When a person used one pole to excess—as seen with intellectuals and libertines—they drained the body's sensibility and sapped procreative energy.

For this reason, Virey argued, great men rarely beget distinguished children, or they could not reproduce at all.[59] Newton provided a model: while his fertile mind had penetrated the cosmos his body proved sterile in the earthly world.[60] Virey thus rejected Robert's "mega-anthropogenesis" because it favored social mobility over piety and rustic virtue, two things needed to keep a hierarchical, patriarchal society. In his eyes, mega-

anthropogenesis appealed to a cynical new aristocracy that embraced decadent materialism rather than sentimental virtue.[61]

In 1808, the anonymous *La Philopédie, ou avis aux époux sur l'art d'avoir des enfans sans passions* provided the fullest expression of this newly conservative worldview. Moving beyond Virey (who never disavowed his republicanism), the author—who described himself as a twenty-nine-year-old bachelor—wanted to create a self-help manual to cure hypersensibility and radicalism. Perhaps hoping to appeal to ex-aristocrats and nostalgic émigrés, the author adopted a more pious and sentimental tone.[62] After the French Revolution, he said, society must breed and educate a new generation of sensible, loving, and responsible subjects. Unlike Millot and Robert, who advertised their knowledge of clinical pathology and embryological science, this author returned to an explicit Cartesian dualism. As he saw it, the individual was made of two substances: one material and corruptible (the body), the other pure and immaterial (the soul). As an emanation of God, the soul was perfect; its impurities only came from its union with the body's flesh. By perfecting the body, then, individuals could eradicate moral vices and thus bring them closer to God. As the author explained, *"a moral evil* is only an organic vice susceptible of being rectified," and he localized sin in the body's physical drives—what moral hygienists called the "passions of the mind."[63]

Passion was society's biggest problem. An impassioned person often lacked pity and empathy, two things that a just and harmonious society always needed; in times of political crisis, excessive passion caused anarchy, violence, and civil war. Fortunately, parents could teach their children how to control their sensibility by imparting moral values and self-discipline. As the author put it, a man without passions found a peaceful harmony and inner feeling of satisfaction and happiness. In creating passionless offspring, parents were not simply raising nonreflective or misanthropic children. Quite the contrary, the man without passions was a man who could distinguish between vice and virtue, private charms and public dignity. This person was constant but faithful, compassionate but not weak, religious but not fanatical, patriotic but not ferocious. In these circumstances, doctors and educators imparted the self-reliance and moral values that guided citizens in all moral and civic duties. Doctors and educators thus recognized citizens rarely fit into preconceived "rational" molds; instead, education should form them "according to the state adapted to their tastes, character, and liking."[64]

To cure passion, parents and children needed sexual hygiene. As the author saw it, both vice and virtue had material attributes. Given current medical understanding, he believed that children might inherit physical vices and that mothers might communicate (or incubate) these debilities in their wombs. He was struck by recent reports about crime and madness in particular families, evidence that suggested that children inherited deviant tendencies.[65] Nevertheless, the author rejected that biology determined moral behavior and he cautioned against materialist sophisms. As he saw it, the Supreme Being might give individuals innate ideas about vice and virtue, but sensory experience and education shaped moral autonomy. Individuals could always improve (or degrade) their minds and bodies. In this sense, degeneracy was a constitutional vice and not caused by "an organic necessity."[66] As a result, readers should reject luxurious and libertine trappings, such as philosophic freethinking, sexual free living, gambling, popular novels,

fashionable clothing, wet-nursing, coffee, tea, and tobacco, among other things. By altering their lifestyle, citizens could cure physical degeneration, and he encouraged women to educate themselves and implement these reforms in the nursery.

Fig. 5.4. Plate from Jacques-André Millot, *L'Art d'améliorer et de perfectionner les hommes, au moral comme au physique* (Paris: Migneret, 1801). Académie Nationale de Médecine, Paris. Millot's vision of domesticity. The caption reads, "I owe him my forces and my virtues …"

S'il est sous le ciel un objet qui mérite de fixer les regards de la Divinité, c'est, sans contredit, une Mère qui allaite son Enfant.
P. Legrand, Del.
Maradan, Sculp.

FIG. 5.5. Frontispiece from Jacques-André Millot, *Médecine perfective ou code des bonnes mères* (Paris: Léopold Collin, 1809). National Library of Medicine, Bethesda. Millot drew his family values, in part, upon J.-J. Rousseau's *Émile* (1763). The image reads: "If there's any object under the heavens that warrants the gaze of divinity, without doubt it is that of a mother nursing her child."

As this chapter has suggested, these self-help sex manuals were more than a simple craze, a garish fancy that appealed to fashionable elites in the anarchic and culturally ambiguous world of postrevolutionary France. Rather, these books stand at the crossroads of significant changes in the remaking of cultural authority in France. As such, this medical genre casts important light on three historiographical questions about the nature of medical power, gender relations, and politics in the early nineteenth century.

The first question concerns the relationship between medicine and ideology. For several decades now, Michel Foucault's provocative "biopower" model has influenced the historiography on sexuality and medicine. Foucault originally used the term to describe how authorities tried to control all elements of human life. For him, biopower took two forms: first, an "anatomo-politics" to control the individual body; and second, a "bio-politics" to regulate the population as a species.[67] Foucault's chosen word was "governmentality." He thus identified an ideological or "discursive" partnership between the state, professions, and social elites; in turn, these disciplines and technologies worked together to exercise power upon a given polity.[68]

On the surface, given this emphasis on sexuality and population in postrevolutionary sex manuals, Foucault's biopower model seems to offer a fruitful approach. Historians have sometimes characterized Millot, Robert, and Virey as strange but slightly sinister precursors to modern eugenics.[69] In this case, however, it is unclear what interests these doctors served beyond their own. As this chapter has shown, these self-help doctors avoided a concrete ideological or professional agenda, preferring to write from the more nebulous margins of medical practice. They were curious outsiders, strangers to new social elites, political power, and the medical establishment itself (this alienation may have motivated their bombastic style and plans). These writers advocated less a broad agenda than they tried to calculate their readers' desires and political sensibilities. Like the empiricists and mountebanks who hawked their cures on Quack Street, these doctors competed in the medical marketplace—but in this case, they sold not remedies but the keys to sexual happiness.[70] As such, doctors tried to appeal to particular demographic groups and distinguish themselves by offering titillating or bawdy subject matter. In this manner, medical writers diluted any broad hegemonic program and reinforced their reader's existing political and religious views. Given their underlying tone, the writers were closer to the saucy and subversive world of eighteenth-century pornography than Foucault's "political technologies of governmentality." Here again, Sade's medical appropriations, as seen with *La Philosophie dans le boudoir*, suggest something of this dynamic.

Second, these books cast substantial light upon the so-called "sexual panic" of the late 1790s and early 1800s, a panic that forced contemporaries to embrace bourgeois views about separate spheres and sexual incommensurability and which, as has been seen, had informed the natural histories of women of Gabriel Jouard and J.-L. Moreau de la Sarthe, among others.[71] As historians Londa Schiebinger and Thomas Laqueur have controversially argued, modern ideas about sex difference appeared at the end of the eighteenth century. During this period, it is said, science and medicine shifted from a "one-sex model" to a "two-sex model" of sexual dimorphism.[72] Accordingly,

contemporaries no longer saw men and women as anatomically homologous, distinguished by humoral qualities alone. Rather, they thought men and women were sexually distinct beings and thus inscribed sexual difference throughout the body, from the genitalia to the skeleton.[73] At the same time, doctors and naturalists moved from the old Galenic model of conception, which emphasized how both partners contributed to procreation, to the new ovist model, which devalued sexual activity in generation. In so doing, doctors elided female orgasm from medical texts and now claimed that women were sexually passive and frigid beings.[74] These sexual theories had political ramifications. During the French Revolution, for example, legislators used biomedical science to justify pushing women from public life and enshrine the separate spheres ideology in the Civil Code of 1804.[75]

The sex manuals published in the early 1800s complicate this picture, joining a substantial critique that has focused upon sexual writings of the medieval and early modern period.[76] Although a whole generation of postrevolutionary doctors learned disparaging theories about female physiology and embryology from writers such as Pierre Roussel and Moreau de la Sarthe, these particular texts, at least, avoided drawing a consistent or systematic gender ideology from biomedical science. Within the sex manual genre, Virey was perhaps the most systematic misogynist—we have seen this in his "natural history of women"—but his malevolence, at least in this setting, seems distinctive. Robert, for instance, criticized legislative action against women and he even pushed for greater equality between the sexes, especially with education. Millot still hoped to placate his women readers, his conservatism notwithstanding: he emphasized female education and treated them as active agents in political regeneration. Even *La Philopédie* criticized the current rage for having boys and tried to flatter women readers by likening their new civic duties to the spiritual call of Joan of Arc—a call likely calculated to appeal to traditional Catholics and more conservative readers.

That said, these writers were not feminists in the current understanding of that word. None of these doctors argued for sexual equality or a change in women's legal status. When compared to the antifeminist violence of some doctors and legislators, however, these self-help writers were pro-women: they advocated some forms of female agency and addressed women as self-motivated actors in sociopolitical change.[77] They also saw women as inherently libidinous, sexual beings and stressed that couples should restrain their sexual behavior only when they wanted to conceive. In truth, however, the reason was probably less enlightened than calculated. Doctors understood that women also consumed books and medical services, and they might resent sustained misogyny in their reading selections or refuse to tolerate it from their general practitioner. In this case, the medical marketplace finessed biological models of sex difference.

Most strikingly, these sex manuals exemplify—much as the natural history of women and physiognomic writing—how medicine assumed a mediating voice in French politics in the postrevolutionary period, and it should not surprise that there were greater points of contact between all these writers and the genres they were producing. The books taught readers new tools and new language—here, ideas about hygiene, physiology, embryology, and heredity—to explain bewildering changes in society and, perhaps more importantly, to justify moral values and political interests in scientific and objective

terms. Crucially, however, these writers also assumed that their readers had already formed their political and moral views. Like English Newtonians after the Glorious Revolution, these doctors tried to reinforce particular beliefs rather than change them.[78] For example, *De la Propagation* addressed sartorial and freewheeling elites, Millot appealed to fashionable conservatives and chastened ex-aristocrats, Robert targeted moderate republicans and Napoleonic technocrats, Virey appealed to Rousseauian pastoralists, and *La Philopédie* potentially addressed traditional Catholics and nostalgic aristocrats.

Despite these ideological differences, the sex books of the early 1800s preached a common message. These doctors taught that men and women could use their private homes as a specially controlled environment—an affective laboratory—in which they could raise their children according to chosen values. These books underscore how contemporaries withdrew into private life following the political violence and warfare of the revolutionary and Napoleonic period; they preferred the intimate associations found in family and civil society over the collective sociability associated with the radical republic. Under the authoritarian Napoleonic state, these writers exploited official efforts to direct personal energies away from the public arena back into the private realm. By being devoted spouses and loving parents, individuals could still think of themselves as engaged and patriotic citizens, even though a dictatorial regime had stripped them of active political rights. Doctors thus encouraged readers to abandon revolutionary activism and use their energies to mold a generation yet to come. A better future would come by more natural, organic means. Yet in this process the doctor could always give nature a helping hand.

With this genre, then, medicine fused more clearly with reader values and expectations, seeking to help them to attain specific political and gendered ideals within the domestic or private sphere proper. It was, in different measures, both radical and subversive, in some cases, and prescriptive and normative, in others. In the next chapter, we'll see how one doctor and his fellow travelers sutured together medical knowledge, gender, and political ideals, not in the family realm but in the fraternal and egalitarian world of the anatomist's studio. Here, subculture and genre created its own ghoulish laboratory of aesthetics, writing, bodies, and desire.

CHAPTER 6

Sculpting Ideal Bodies

Medicine, Aesthetics, and Desire in the Artist's Studio

In Paris, in November 1804, members of the Class of Fine Arts at the National Institute of France were asked to referee an unusual project. It was an ongoing scientific study conducted by the physician and artist Jean-Galbert Salvage (1772–1813) on the anatomical structure of the so-called *Borghese Gladiator*, the famed Greek sculpture, signed by the artist Agasias and dating from the first century BCE (fig. 6.1). Ever since the *Gladiator* was first dug up and installed at the Villa Borghese outside of Rome, sometime around 1611, art critics had hailed the figure as a paragon of male beauty, elegance, and anatomical precision.[1]

Two hundred years later, artists and connoisseurs were still praising the figure in the same effusive terms. Alongside the *Laocoön* and the *Apollo Belvedere*, the *Gladiator* was one of the best-known sculptures of Antiquity, as people understood that canon at the time.[2] There were thousands of replicas, ranging from full-size bronze casts to smaller miniatures, which adorned fashionable spaces as diverse as public parks, private gardens, home *secrétaires*, and mantelpieces, and this quality made the *Gladiator* a ubiquitous set piece in the material culture of the age. These replicas, for instance, are caught in paintings such as Jean Cousteau's *Allégorie de la sculpture* (n.d.) and Joseph Wright of Derby's *Three Persons Viewing the Gladiator by Candlelight* (1765) (fig. 6.2).[3] In 1800, Antoine Mongez wrote that the *Gladiator* represented the classical ideal of beauty in its highest form; and in 1803, Esprit-Antoine Gibelin asserted that the sculpture should be "admired

as a perfect model of human beauty in action."[4]

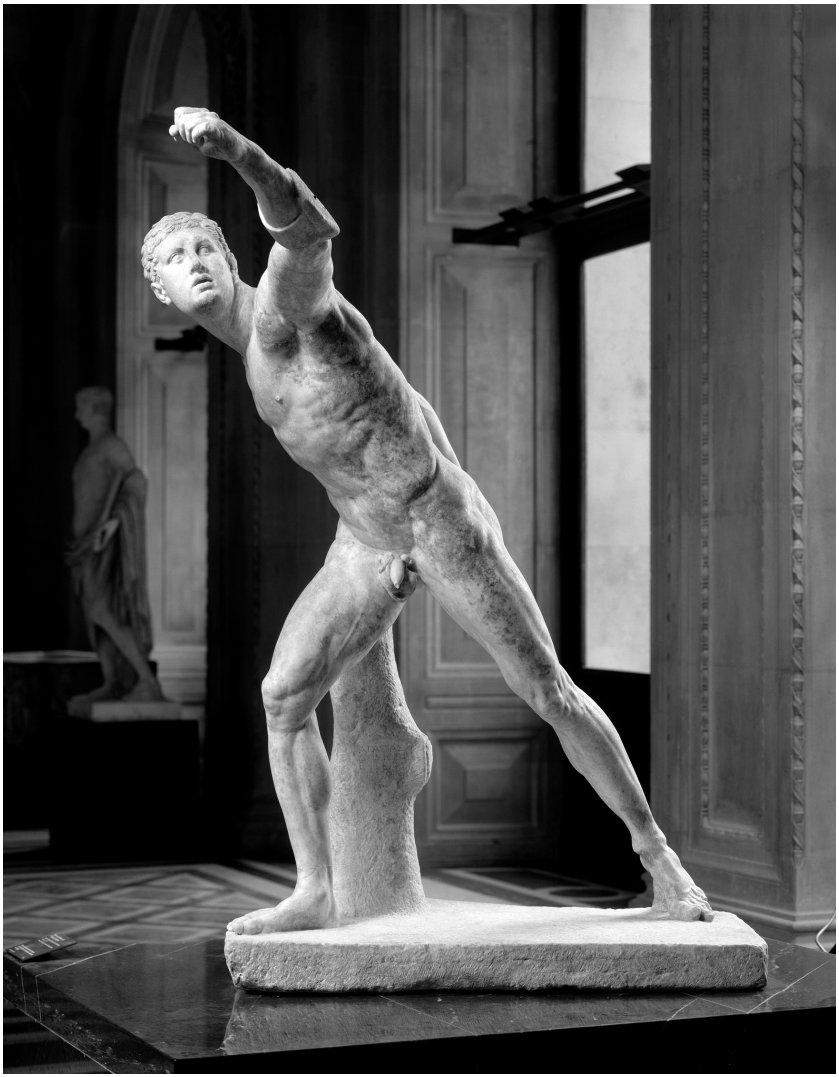

Fig. 6.1. *The Fighting Warrior* (*Borghese Gladiator*), Department of Greek, Etruscan, and Roman Antiquities (3rd–1st centuries BCE). Louvre, Paris. Roman copy of a Greek original (now lost).

In the 1790s, these qualities captivated Salvage, and the young doctor then set out to investigate what made the *Gladiator* so beautiful and realistic. From what we can piece together from Salvage's sources, it seems that he gathered together a small band of colleagues and students and began studying the piece's naturalist basis systematically. In a

scene befitting Mary Shelley's *Frankenstein*, they scavenged the Paris morgues for bodies of beautiful young men, often killed in duels. He then used pieces of these corpses to sculpt models of the *Gladiator* and several other canonical pieces from Antiquity in a process that Salvage called "anatomizing" (fig. 6.3). (Although the original casts are now lost, two copies of his anatomized figures stand today in the morphology hall of the École Normale Supérieure des Beaux-Arts.)

Fig. 6.2. Joseph Wright of Derby, *Three Persons Viewing the* Gladiator *by Candlelight* (1765). Wallace Collection, London. Wright's painting shows the ubiquity of the *Gladiator* in the eighteenth-century imagination.

However unconventional Salvage's work may seem, it was acclaimed by his jury at the Institute, which included the sculptor Jean-Antoine Houdon and the painter Jacques-Louis David. This success emboldened Salvage, and soon after he published a prospectus in 1804. The final, lavishly illustrated volume, titled *The Anatomy of the Fighting Gladiator, Applicable to the Fine Arts*, appeared in 1812, four years after Napoleon Bonaparte had bought the original piece and installed it in the Louvre museum (where it stands today).[5]

Salvage's piece has not rotted in obscurity. His engravings are often featured in museum exhibitions on anatomical illustration and still adorn present-day medical textbooks.[6] However, the settings of his work—and the ideological, aesthetic, and gendered assumptions that guided him—have received less sustained scholarly attention.

Within the field of art history, Salvage has been briefly discussed in tandem with postrevolutionary aesthetics by Dorothy Johnson, Meredith Shedd, and Philippe Sénéchal, and Raymond Lifchez has provided an invaluable biographical study of Salvage and art patronage in revolutionary France.[7] Usually, art historians see Salvage as helping push artists from neoclassical idealism to portraying the human figure, especially the male nude, in more naturalistic ways. This graphic realism marks in dramatic fashion David's massive *Leonidas at Thermopylae* (1814), which foregrounded the Spartan king's earthy body, hairy chest and all, as he contemplated his patriotic self-sacrifice. Historian Athena S. Leoussi has argued that this realist trend created "the conditions for a new, scientifically derived, Greek revival in art," and potentially prefigured the realist turn of the early 1830s.[8]

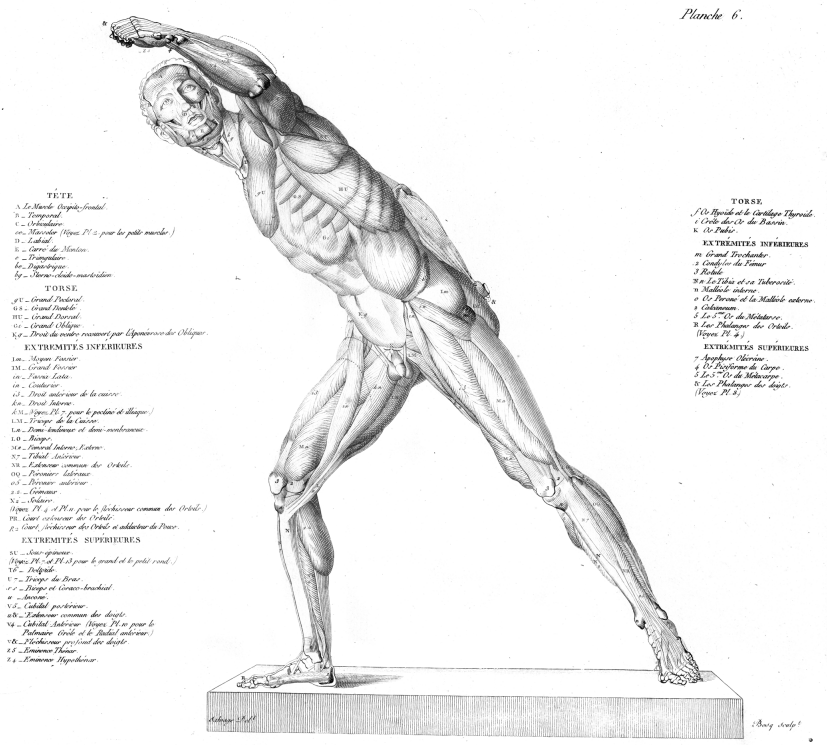

FIG. 6.3. The "anatomized" figure from Jean Galbert Salvage, *Anatomie du gladiateur combattant, applicable aux beaux arts, ou traité des os, des muscles, du mécanisme des mouvements, des proportions et des caractères du corps humain* (Paris: Chez l'auteur/de l'imprimerie de Mame, 1812). Bibliothèque Interuniversitaire de Santé, Paris.

In this chapter, I am less interested in how Salvage contributed to the visual culture of this time than in how he was fusing political ideals and medical language in France

during the postrevolutionary years: namely, the continuing desire, within critical legislative and intellectual groups, to regenerate the French nation in its "physical and moral" totality. There was a relentlessly masculine vision associated with this desire. As seen earlier, politicians and intellectuals concerned themselves with molding a new man and a new society and debated what this regenerated society would look like and how they could make it. Generally, revolutionaries wanted to sculpt this new man following the model of ideal beauty inherited from the Greco-Roman past and embodied at the time in neoclassical aesthetics, which combined classicized forms with ancient ideas about civic virtue.[9] These ideas about regeneration were captured, for instance, in J.-L. Pérée's engraving, *L'Homme régénéré* (1795). This image portrayed the regenerated man as a galvanized Prometheus who had risen from the compost heap of throne and altar (fig. 6.4).

Throughout the 1790s, dreams about regeneration inspired ambitious projects among legislators and activists, whether in the form of public instruction, national festivals, monuments, or hygiene and health care. However, Salvage reveals how ideals about regeneration intersected between two different professional groups: artists and doctors. For artists, regeneration was important because they wanted to furnish images and designs that elevated the beauty of ordinary people and everyday life.[10] For doctors, regeneration was important because they wanted to use medical science to regenerate mind and body and make the nation more healthy, beautiful, and populous.

In what follows, I argue that Salvage molded his *Gladiator* specimens so that he might bridge medicine and the fine arts and thus localize the regenerated male ideal in the material body. In macabre ways, he took the Enlightenment's favorite metaphor of Pygmalion's statue coming to life and put it in the service of a political, aesthetic, and medical agenda.[11] Here, as seen elsewhere in this book, medicine served as an essential means for expressing and mediating ideological hopes, fears, and memories. However, few people approached the old revolutionary quest for regeneration as literally as Salvage, nor did anyone take medicine, aesthetic vision, and personal yearning to such a graphic level.

When seen in this light, Salvage's work constituted an experimental project that operated on two levels, both of which fit into the larger picture of medical subcultures and genres of the postrevolutionary years. First, Salvage was conducting an experiment to resolve reigning controversies over the basis of ideal beauty, as a critical idea in neoclassical aesthetics, as well as all the political dreams about human perfection that revolutionaries had invested in this ideal. Second, Salvage conducted an experiment in male sociability in which he turned the artist's studio and the morgue into an "affective laboratory," much as sex writers such as Louis Robert and J.-A. Millot had sought to turn the domestic sphere into a laboratory to breed political sentiments and moral values (as seen in chapter 5). With Salvage, young doctors and artists used overlapping professional spaces to test the radical forms of male fraternity that revolutionaries had experienced on more collective terms during the radical republic. Masculinity and politics here assumed a subversive, if not gender-bending, quality. However, nostalgia and bitterness also shrouded Salvage's affective laboratory, one in which a political and social ideal had been irrevocably lost in the traumas of war, terror, and dictatorship.

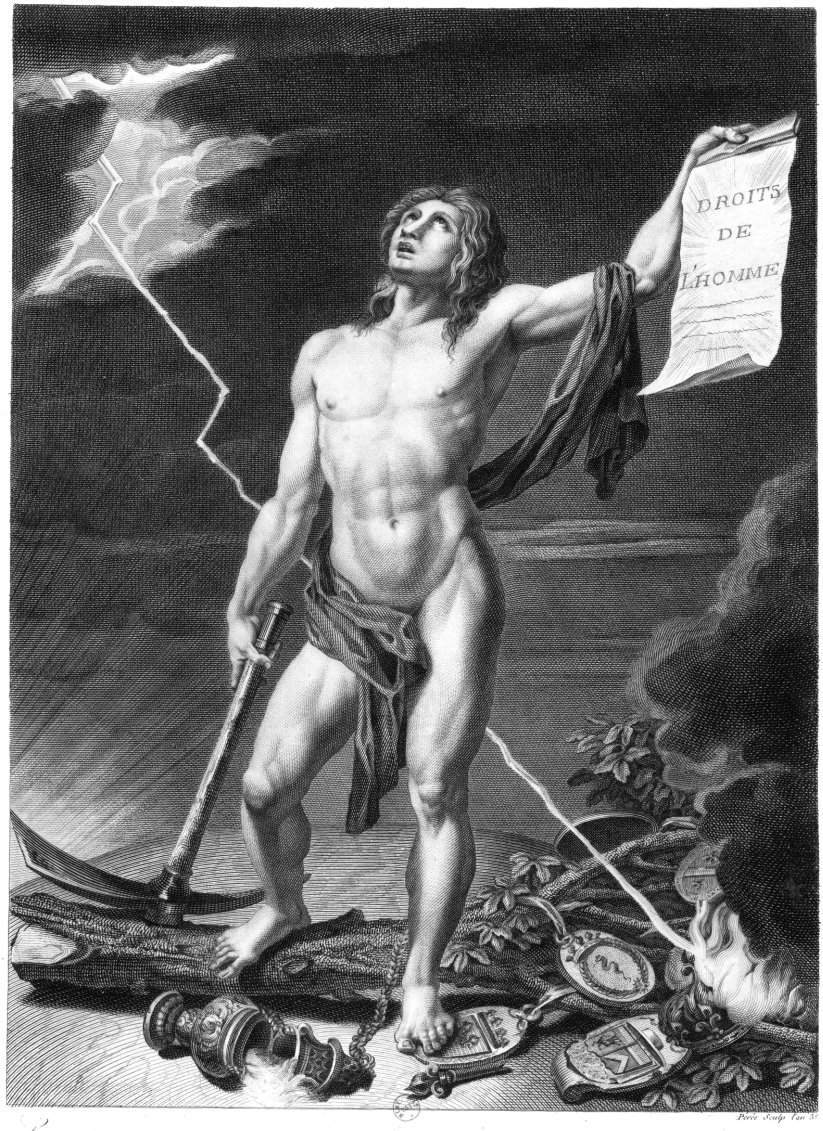

Fig. 6.4. J.-L. Pérée, *L'Homme régénéré* (1795). Bibliothèque Nationale de France. Pérée's figure suggests the relentlessly masculine ideals associated with physical and moral regeneration.

Historians know little about the life of Dr. Jean-Galbert Salvage outside his dealings with the National Institute and the academic art Salon. He took his medical degree from the prestigious medical school at Montpellier and became an army surgeon during the revolutionary wars.[12] At the height of the Reign of Terror, he seems to have been active in radical politics and published at least one pro-Jacobin declaration in the parliamentary archives.[13] In 1794, following the political backlash that followed the collapse of the radical republic, Salvage apparently avoided any political retribution, and in the end, he was stationed in Paris at the military hospital of Val-de-Grâce, right after the republic adopted the new Directorial constitution.

Like many other provincials in Paris, Salvage found that the city opened intellectual doors for him, and soon after arriving he gave full reign to his artistic curiosity. Starting in 1796, he devoted himself to studying drawing and modeling, and he began moving in artistic circles. Two years later, he felt confident enough of his abilities to throw himself into a public debate on art, and on no less controversial a subject than the nature of ideal beauty itself. For his first test subject, he chose the *Borghese Gladiator*.

Upon announcing his project, Salvage attracted enthusiastic supporters. He was soon joined by leading art critics, doctors, students, and even several foreign artists living in the capital, and they worked together out of Salvage's home apartment. After having selected their morgue specimens, Salvage and his followers started modeling the *Gladiator* as well as the *Venus de Medici* and the *Apollo Belvedere*. In making the molds for his body parts, Salvage was helped by Andrea Getti, a Tuscan artist who was working for the Musée Napoléon and who had considerable experience in making plaster casts of canonical Antique statues, including the original *Gladiator* and *Apollo*.[14]

The art community took note. In 1802, for example, Salvage provided engravings for the French translation of Gotthold Ephraim Lessing's critical treatise on the Laocoön statue, and four years later he illustrated Dr. J.-L. Moreau de la Sarthe's new edition of Johann Kaspar Lavater's multivolume work on physiognomy.[15] In November 1806, Salvage felt he had progressed enough to approach the leading aesthetic authorities at the National Institute, and he submitted written samples and one of his anatomized casts. That same year, he also displayed another model, possibly a duplicate, in the anatomy section of the academic Salon. These examples must have impressed critics and other artists because he soon received other commissions.

Despite this professional acclaim, private setbacks that kept interrupting Salvage's work on the *Gladiator*. For one thing, he seems to have contracted pulmonary phthisis (tuberculosis), a malady that his friends and colleagues said had been caused by his decayed specimens (doctors of the time believed that miasma from rotting bodies could cause "pestilential maladies").[16] And beyond this sickness, Napoleon had just launched his 1805 campaign into the German-speaking states, and Salvage spent considerable time and energy in making sure he avoided being transferred to the front. He was also chronically broke and lived, by all accounts, in abject penury. By 1808, events seem to have settled down enough for him to return to work, and he was again exhibiting his specimens at the academic Salon. No doubt, he was also galvanized by the arrival of the original *Gladiator* at the Musée Napoléon (the Louvre), purchased from the Borghese estate by the emperor himself. One can imagine his almost rapturous joy in encountering, face-to-

face, this great object of his imaginative desire.

At last, in 1812, Salvage published his much-anticipated folio edition to strong critical praise. Reviewers declared that the book was "indispensable for painters and sculptors" and urged that educators incorporate Salvage's work into the fine arts curriculum. In response to this positive response, Salvage and Getti now began offering both full- and half-sized models for sale to interested buyers.[17] Unfortunately, right at the moment of this critical and financial breakthrough, the fruit of almost fifteen years of ghastly labor, Salvage succumbed to his chronic illness, dying outside of Paris in the fall of 1813. He was just over forty years old.

What drew Salvage toward this unusual project, and why did his contemporaries find it so compelling and significant? It is perhaps hard to appreciate at first, but Salvage had good reasons to "anatomize" his *Gladiator*. On an initial level, he wanted to discover whether all the claims about the *Gladiator*'s realism and naturalism were, at the bottom of it, genuinely correct. This desire may seem both obsessive and grotesque, yet an important historical question was at stake, and at the time a lot was riding upon it. By probing the *Gladiator*'s underlying physical structure, Salvage hoped to refute the common belief that the ancient Greeks and Romans had refused to dissect people because it violated the divine nature of the human form.[18] Salvage asked: if the Ancients had such a superficial understanding of the human body, then how and why could they have created such beautiful and awe-inspiring statuary images?

Now this "how and why" behind statuary anatomy was a huge intellectual debate, one with many complex twists and turns to it. For the moment, however, it is necessary to underscore how Salvage saw himself contributing to the debate about past medical knowledge. In his opinion, only an artist such as himself, who had been trained in the art and science of medicine, could see that "anatomical principles" in Greco-Roman sculpture were "exactly observed" and this raw fact made them "really and truly beautiful" [*vraiment belle*].[19] Given this acknowledged perfection, he reasoned, the Ancients *must have* practiced human dissection, and Salvage designed his experiments to prove it. As he put it, "[A]rt and science went hand-in-hand to produce the great masterworks which the Greeks have left us."[20] This claim had great significance. If the Ancients practiced dissection, he reasoned, it meant that scientific medicine should inform understanding of aesthetic beauty—all the way, he suggested, to Truth itself.

This one dramatic claim led to another. Salvage further hoped that his research would demonstrate the public utility of the arts and sciences. By combining the two cultures, so to speak, public figures could perfect artistic practice and hence elevate the visual arts in general. In practical terms, this meant that legislators and educators needed to teach scientific anatomy in the art academies and that this subject should be taught only by qualified doctors and surgeons.

By pressing this point, Salvage was situating his work in a broader discussion about curricular reform, which had been going on in art circles since the mid-1700s. During this time, leading artists and critics had complained that modern painters and sculptors lacked sufficient knowledge of science and mathematics, and they pushed for stricter standards in the academic curriculum. One such figure was Alexandre-Marie Lenoir

(1761–1839), who became the director of the Museum of French Monuments in the 1790s.[21] In response, several reform-minded artists and doctors wrote instructional manuals to inform artists about human anatomy. This didactic agenda informed the works of Jacques Gamelin (1738–1803) and Jacques Gautier d'Agoty (1717?–1785), to name two of the more prominent (fig. 6.5).[22]

More ambitiously, artist-anatomists hoped to fill this curricular lacuna by identifying a universally valid set of anatomic proportions. They wanted to discover a normative canon to guide painters and sculptors in portraying the human figure. The most famous of these artist-anatomists was Bernard Albinus (1697–1770). Albinus broke with the illustrative tradition derived from the renowned anatomist Andreas Vesalius (1514–1564), who had worked from a single cadaver and created robust but sometimes inaccurate figures more in tune with the aesthetics of the Catholic Baroque. Unlike Vesalius, Albinus used multiple corpses so that he might portray the human figure most accurately and realistically. Given these parameters, as art historian James Elkins has suggested, Salvage situated himself in the Albinian anatomical tradition because he worked with multiple morgue specimens.[23]

Two particular doctor–anatomists influenced Salvage: Jean-Joseph Suë the Elder (1710–1792) and Jean-Joseph Suë the Younger (1760–1830). Both father and son, as seen in chapter 3, had earned permanent positions teaching anatomy at the Paris fine arts academy. Salvage was acquainted with the family and was, quite possibly, on friendly terms with them. Colleagues praised the younger Suë for encouraging art students to study human and comparative anatomy firsthand in the dissection laboratory, and his teaching impressed other teachers and pupils. However, he is relevant for Salvage because he argued that artists needed to conceptualize the human figure at the level of skeletal structure. These ideas influenced an entire generation of art students and shaped how Salvage "anatomized" his statues.[24]

One other thing else connects Salvage and the Suë family, and this connection emerges in the archival record. In his academy lectures, the elder Suë had called for a national competition to encourage students to contemplate the skeletal structure of several canonical sculptures from Antiquity, including the *Apollo Belvedere* and the *Medici Venus*. Yet the most important piece to study, he said, was the *Borghese Gladiator*. Salvage took him up on this challenge, and he did all three.[25]

These points about anatomical training and the fine arts demonstrate that Salvage's colleagues saw him as a serious professional working within a serious tradition of anatomic illustration. In both the scientific and lay press, reviewers lauded his anatomical virtuosity and encouraged artists, doctors, and the general public to read and study his works. For instance, in the *Gazette de Santé*, a leading journal from the period, the editor Dr. Marie de Saint-Ursin characterized Salvage as a "young savant, too little recognized" and praised his "highly extensive anatomical understanding."[26] Salvage's artistic experiments filled a pressing need, within the artistic community, for tools to improve artistic technique, especially for those sculptors who toiled in the shadow of Greco-Roman virtuosity.

That said, Salvage differed substantively from other doctor-artists such as the Suë family. None of these other anatomists, it is fair to say, burned with the same ideological

ardor. Salvage's flayed models tested political questions about the relation between the fine arts and forms of government—questions that resonated strongly in postrevolutionary culture.

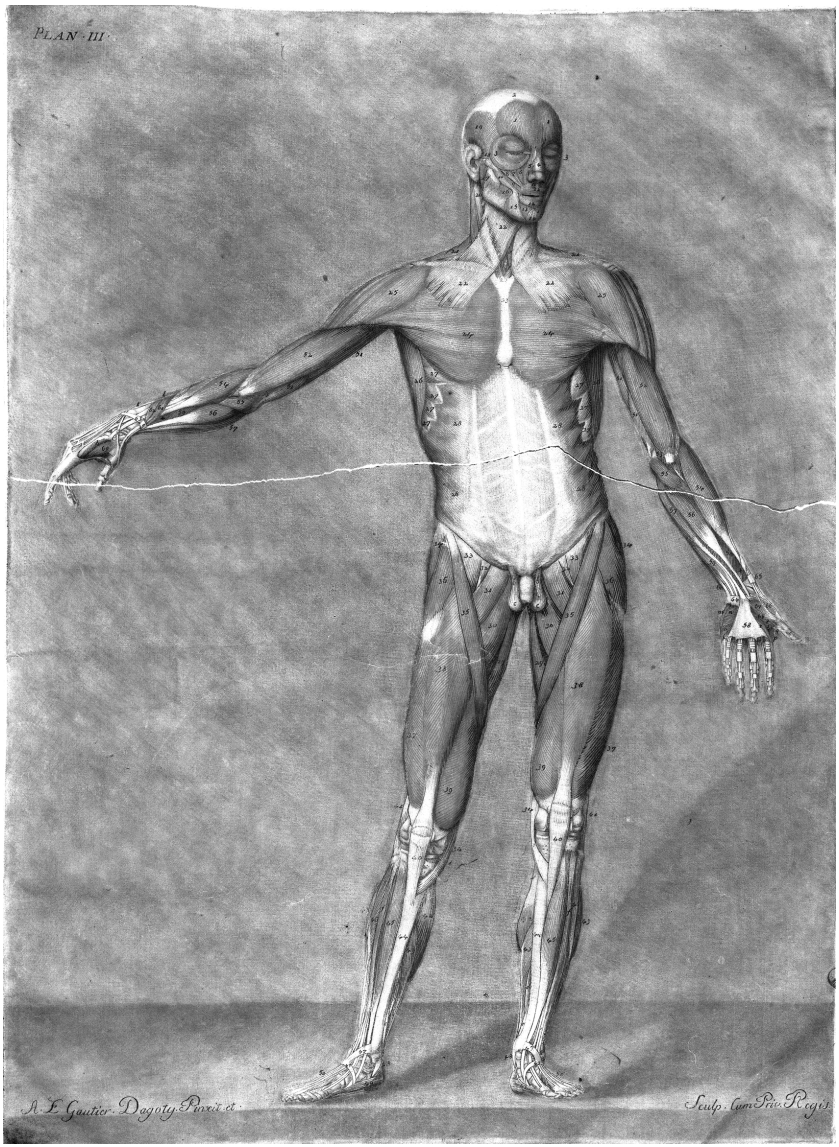

FIG. 6.5. Plate from Jacques Gautier d'Agoty, *Exposition anatomique de la structure du corps humain*, Marseille: Vial, 1759. Bibliothèque Interuniversitaire de Santé, Paris. The human figure exposed. In a similar way to Salvage, Agoty's early innovative work had both aesthetic and pedagogical agendas behind it.

Salvage's experiments broached a question that had long vexed academicians and art critics: namely, whether Greco-Roman art reflected *idealized* or *realistic* forms of human beauty. If modern artists could answer this question in definitive terms, they would understand how to study the human figure properly and attain the beauty and perfection that critics attributed to the iconic pieces of ancient art. Before 1789, only a small number of artists and aesthetes had pondered this rarefied question. However, the cultural politics of the French Revolution transformed artistic theory and practice into a pressing, if not incendiary, ideological issue.

Salvage revealed his opinion on corporeal realism when he declared that art students should receive formal anatomical training. For him, artists could only make great images if they overcame their abject disgust for the dead body and took it apart with their own hands. They must enter the charnel house so that their art might live. There was no other way that artists could breathe life into their creations. Otherwise, neither the painter nor the sculptor could transcend the stilted, one-dimensional figures they made when they just studied live models. In all this, Salvage insisted that he was advocating nothing new. Instead, these ideas about anatomical experience had been first propounded and practiced by the Ancients. Fortunately, the French Revolution had allowed the present generation to rediscover them.[27]

In making such claims, Salvage cast himself into the turbulent waters of revolutionary taste and style. With aesthetic ideals and practice, revolutionaries wanted to discover the conditions, whether artistic, political, or even geographical, that had allowed the artists of Antiquity to create such elevated works of beauty. Revolutionaries then wanted to know whether the government could resurrect these ancient conditions through political and institutional change and thus make this great art live again in the here and now.[28]

Salvage's experiments harked back to the debates about the fine arts, institutions, and government of the early years of the French Revolution. The gauntlet was first thrown down by the critic Antoine-Chrysothôme Quatremère de Quincy (1755–1849) in his pioneering *Considérations sur les arts du dessin* (1791). Quatremère asked whether political and institutional reform could improve the fine arts and restore them to their former glory. His answer was clear and straightforward. For the arts, he said, the best form of government was a democracy, which alone gave artists the freedom to make great art and gave their viewers the freedom to appreciate it.

Inspired by Quatremère's words, several art critics, ranging from Henri Jansen to André Chénier, claimed that the French Revolution offered a fantastic opportunity for the fine arts. Accordingly, the Revolution allowed artists to liberate themselves from the Rococo style of the Old Regime, which they associated with aristocratic privilege and an effeminate and decadent taste. Artists could now work in the more masculine neoclassical style, a style which they said better reflected republican morals and manners.[29]

Beyond professional and class interests, revolutionary art had a broader didactic agenda. For radical activists, the fine arts could perfect society by providing a better aesthetic environment, ranging from design to images, which could elevate the people in body and spirit. This archetype came from ancient Greece, a time and a place where the

"arts had attained the greatest perfection."[30]

In this discourse, one figure loomed large: Johann Joachim Winckelmann (1717–1768). Winckelmann was a renowned art historian and aesthete, the so-called "high priest" of the Enlightenment cult of Antiquity.[31] In the mid-1700s, he published a series of influential writings that celebrated ancient Greece as a "lost world" of beauty and personal freedom. In these texts, Winckelmann advocated a so-called liberty theory of culture. Democracy and good climate had made the ancient Greeks beautiful in body and mind, and they inscribed this elevated subjectivity into their artistic works.[32] During the 1790s, these ideas shaped revolutionary discourse, as public figures speculated whether the new republic had met Winckelmann's "historical conditions" needed to resurrect this lost art (Montesquieu notwithstanding, the other factor of Greek climate went largely unexplored).[33]

After the Reign of Terror, leading intellectuals reconsidered Winckelmann's liberty theory of culture, many of whom now doubted if democracy promoted anything but mob violence. In critical ways, as Annie Becq has shown, intellectuals converged upon Winckelmann's idea of ideal beauty. As Winckelmann saw it, ideal beauty meant the ideal male figure composed from the beautiful proportions found in nature, which the artist then combined to form a more idealized, transcendent beauty rooted in "regularity," "proportion," and "harmony."[34] Reality, in this sense, thus passed into the realm of the Ideal. However, this debate shifted after 1799. Under the Napoleonic regime, intellectuals now wondered whether the essential condition needed to attain Winckelmann's ideal—namely, freedom—could persist under a military dictatorship that had stripped its citizens of active political rights.[35]

This debate took two sides. On one side was Quatremère de Quincy, who remained a passionate supporter of Winckelmann's aesthetic vision. Quatremère opined that ideal beauty remained just that, an ideal, something projected from the Greek genius. It did not reflect an actual nature that was simply "out there," waiting for the artist to transcribe. Consequently, modern artists would never find this ideal beauty because they could never revive the historical conditions under which it was first imagined and attained. At best, Antiquity gave the moderns a torch with which they illuminated their own artistic path.[36]

On the other side were two imposing aesthetic authorities: Ennio Quirino Visconti (1751–1818) and Toussaint-Bernard Emeric-David (1755–1839). Both men were affiliated with Napoleon's new Louvre museum and were busy cataloging all the looted antiquities arriving from Italy. Emeric-David also had a personal connection with Salvage: he supported Salvage's experiments and worked with him at his home studio. In a series of influential writings submitted to the National Institute, Emeric-David argued "ideal beauty" was not ideal at all but rather "real beauty," that is to say, "really real."[37] The Greek artist, he said, selected from the best specimens available to him in nature and then assembled them by applying the formal laws of proportion. By comparing dissected bodies with antique sculpture, Emeric-David concluded that beauty resided not in the mind of the artist but in the timeless and unchanging laws of nature. Art and political power became one. Great art had little to do with climate and freedom. Instead, it reflected strong political leaders and state institutions, which provided artists with proper

training and patronage.[38] In one comment, Emeric-David suggested that Greek art was inspired not by freedom but rather from conditions arising from constant warfare and struggle.[39]

This debate between Quatremère de Quincy and Emeric-David informed the premise of Salvage's work. His aesthetic experiments potentially settled questions that were not just about the fine arts but were also about political rule.

To get to the heart of the matter, Salvage assembled at least three different flayed models and posed them as the *Gladiator*. Each model provided a different view into the interior recesses of the body, just as the English artist William Hogarth, in his renowned *Analysis of Beauty* (1753), had imagined getting "inside" the body and exploring it from inside out. In French medical circles, a variant of this theme had been promoted by Félix Vicq d'Azyr (1746–1794), the acclaimed comparative anatomist and medical reformer. In his *Traité d'anatomie et de physiologie* (1786), Vicq d'Azyr had urged anatomists to study animal morphology by stripping away layers of flesh, much as geologists studied crystals by breaking down their form and structure to discover the essential core.[40]

Both Hogarth and Vicq d'Azyr informed how Salvage denuded his *Gladiator*. Salvage first made one model for the superficial layer beneath the skin, then a second for the deeper level of the muscle tissue, and finally one for the skeleton and ligaments. He put these molds of rotting flesh in the pose of the *Gladiator* and perhaps moved them to simulate its physical action, so to contrast the exposed muscles with the surface of the living model.

Salvage designed his experiments to test Emeric-David's key point: what he had called the interplay between the "above" and the "below" (the *dessus* and the *dessous*), a theory which he derived from Hogarth, Vicq d'Azyr, and the Suë family.[41] According to Emeric-David, the exterior forms of the body, ranging from complexion to tone, contour, and shape, reflected an underlying anatomical and biological reality.[42] To get inside out, literally, one had to begin with the human skeleton—just like that mythological sculptor, Prometheus—and radiate out to the body's flesh.[43]

In his published work, Salvage documented his results by providing two things: a detailed explanatory text and a section of twenty-two engraved plates. After the frontispiece (whose allegorical content will be analyzed in the concluding section), Salvage assembled a series of illustrations on the individual bones, the facial profile, and the body's extremities. He even provided an anatomized head of the famous *Apollo Belvedere* (fig. 6.6). There followed eleven plates of the flayed *Gladiator* from four points of view—front, sides, and rear—each of which detailed the different layers of the muscles and bones (figs. 6.7–6.9). This section concluded with diagrams to illustrate the mechanics of the human body, the so-called varieties of the human race, and finally, the different stages of the life cycle with reference, again, to canonical statues (fig. 6.10).[44]

In the accompanying text, Salvage used accessible language to explain the technical points raised in the plates about anatomy, physiology, and natural history. In these passages, he drew upon the new clinical medicine pioneered in the Paris hospitals, especially the work on pathological anatomy by Xavier Bichat, on nosography and mental illness by Philippe Pinel, and on physical anthropology and social hygiene by Pierre Cabanis. For each section, Salvage surveyed the scope of human anatomy. He

discussed the mechanics of bodily motion, the various temperaments of man, and taxonomies of race and physiognomic expression, the latter of which he updated from the aesthetic canon established by the great classicist painter Charles Le Brun in the seventeenth century.[45] In essence, Salvage distilled the cutting-edge biomedical science of the Paris clinics and put it in a general and reliable format so that any artist could use it.

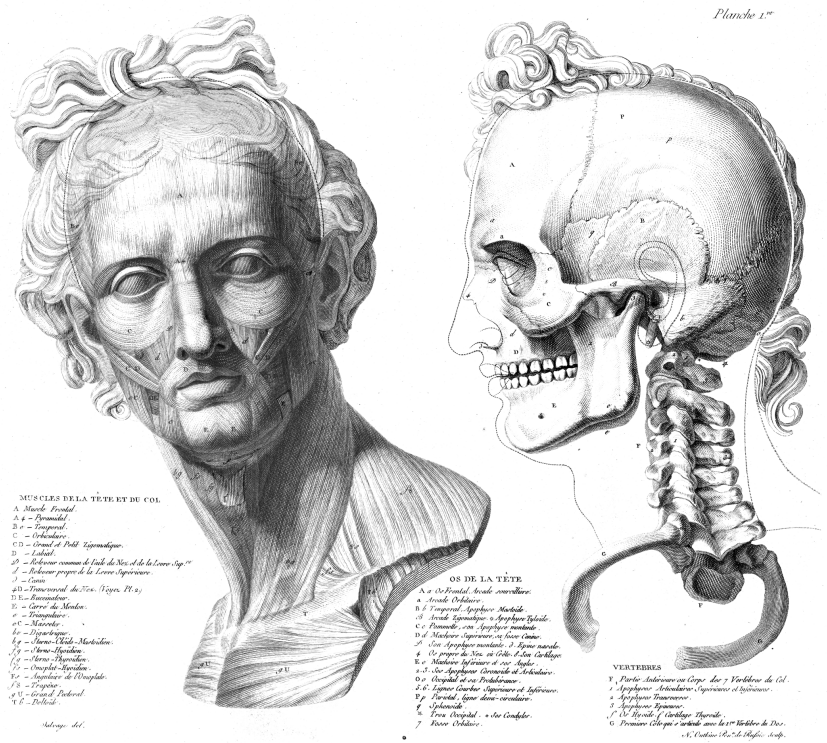

FIG. 6.6. Plate from Salvage, *Anatomie*. Salvage's "anatomization" of the *Apollo Belvedere*, another of the canonical antique figures in the eighteenth century. Like the *Gladiator*, this statue was also a copy of a lost Greek original.

Through these means, Salvage unveiled the underlying structure of the *Gladiator*. Whenever possible, he compared each bone and each muscle and each surface to the same body parts of other canonical statues so that he might highlight the extent of Greek anatomical precision. To do so, he even received special permission from the National Institute to work at the Louvre museum, where he measured proportions and took detailed notes.[46]

Nonetheless, the anatomical skill that Salvage identified in the bits and pieces of other statues paled when he compared it to the graphic totality of the *Gladiator*. Salvage was impressed by the quality of its neck muscles, the pectorals, the gluteals, the dorsals, the

deltoids, the rhomboids, and so on. However, one thing stuck out on the hips and seemed to confirm his hypothesis that the Greeks had practiced dissection. It was the iliac muscle, which Agasias had captured in the figure's turning and thrusting motion. Only an artist well-versed in dissection, said Salvage, would have rendered this obscure muscle at all and not have written it off as a glandular protrusion on the surface of the skin.[47] Here was the evidence, it seems, for Emeric-David's "really real."

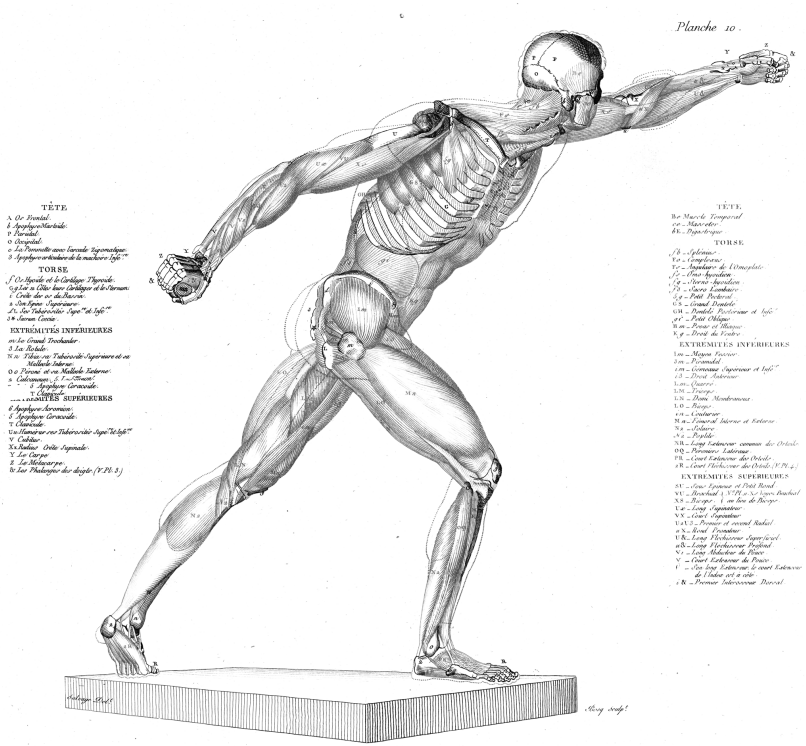

FIG. 6.7. Plate from Salvage, *Anatomie*. Salvage detailed the *Gladiator*'s skeletal and muscular foundations.

Because of this anatomical precision, the *Gladiator* incarnated an artistic perfection—not one, as Salvage stressed, derived from intuition or imagination—but of a male beauty that existed in the real living world. It was out there in nature, either whole or in parts, and the careful artist needed but learn to identify it. Beauty emanated less from genius than a razor-sharp precision honed in the dissection laboratory.

When Salvage turned from ideal bodies to the more practical world of anatomical training, he seemingly confirmed what Napoleonic apologists such as Emeric-David and Visconti had been saying all along: to make great art, society needed to provide artists

with solid education, scientific training, and dynamic leadership—and that was all. Liberty, Winckelmann's component for great art, failed to matter. Although Salvage claimed that science and the fine arts went hand-in-hand—and although he associated with Emeric-David—he likely rejected this authoritarian approach to art. Crucially, Salvage's experiments give clues about something else: namely, the memories of his Jacobin past.[48] These memories gave Salvage's *Gladiator* project a subversive quality, as he identified himself with other artists and doctors who wanted to reconcile radical values with the realities of political reaction.

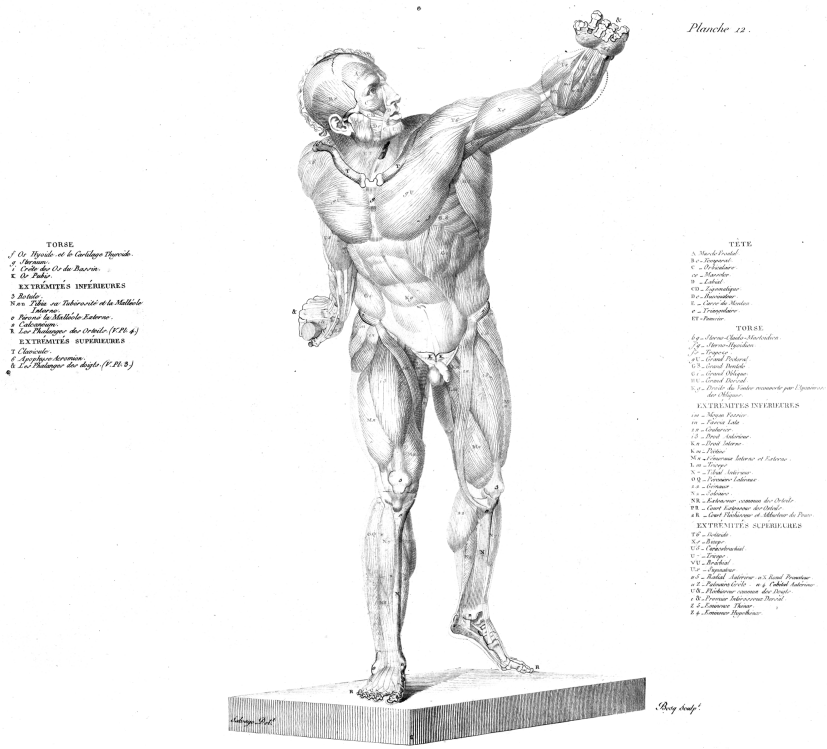

FIG. 6.8. Plate from Salvage, *Anatomie*. Front view of the *Gladiator*.

To understand this subversive quality, we need to look beyond Salvage's published writings and focus on how he made his art and how he lived out his aesthetic principles. In short, we need to consider the *social practices* surrounding his *Gladiator* project. When seen in this light, it seems that Salvage turned his study of the male nude into a heroic quest that was joined by an intimate and like-minded fraternity, a subgroup practice that sought to substantiate or recapture political ideals or past experiences. Salvage thus paralleled a fascinating development in male sociability that followed the Reign of Terror.

These parallels help illuminate the deeper structure behind Salvage's work.

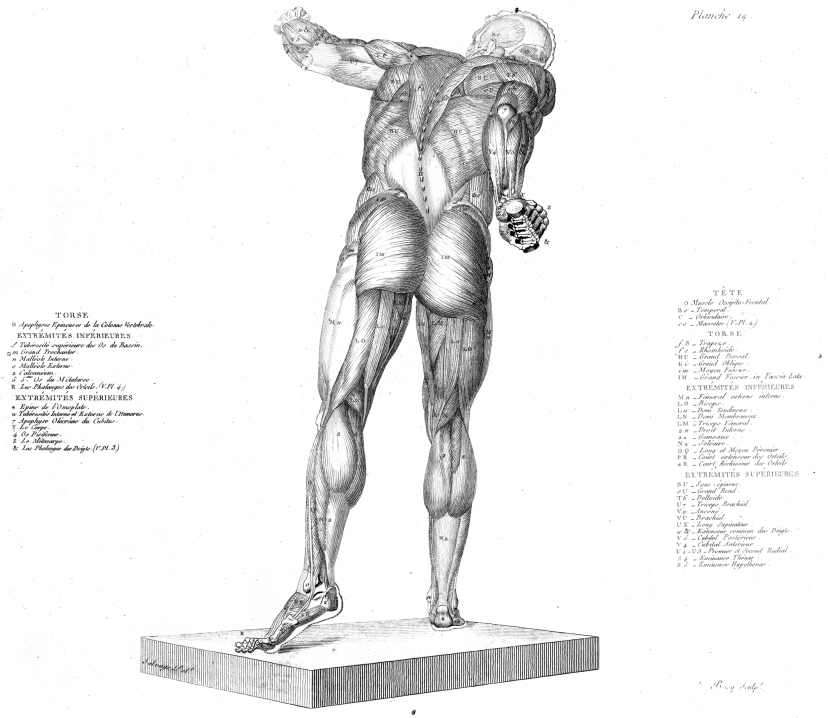

FIG. 6.9. Plate from Salvage, *Anatomie*. Back view of the *Borghese Gladiator*.

After the Reign of Terror, male revolutionaries abandoned the sociability and spectacle associated with Jacobin politics and sought out smaller, more closely knit forms of associational life. These political actors were motivated by fear, revulsion, or sheer exhaustion. On the one hand, former radicals may have missed the intense sense of mass solidarity engendered by Jacobin public display. They now tried to recapture these memories in the context of small, intimate communities. On the other hand, many young men were appalled by the anarchy and anomie associated with the corrupt Thermidorean and Directorial republics, a period that was characterized by financial chaos, conspicuous consumption, perceived debauchery, and socioeconomic misery. Alienated and aggressive, these young men sought meaningful community by creating male subcultures outside traditional institutions associated with the family, religious confraternities, and political clubs.[49] At the end of the 1790s, one finds examples of these communitarian urges in the flamboyant youth gangs and bohemian groups that crowded the Paris streets.[50]

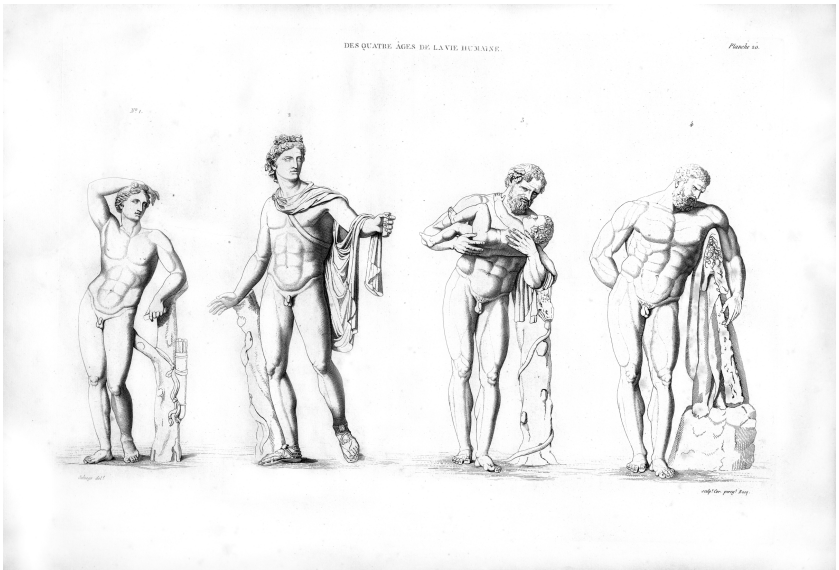

FIG. 6.10. Plate from Salvage, *Anatomie*. The life cycle illustrated by canonical statues from antiquity, including the *Apollo Belvedere* and the *Farnese Hercules*.

These fraternal impulses extended to artistic and medical circles, and they were also reflected in Salvage's work. Significantly, both arts and doctors turned an objective and professional space, whether the studio or the morgue, into a shared space of male sociability. Here they focused upon studying or contemplating the human body, especially the male nude. In many ways, this hybrid or "multipurpose" space corresponds with what Michel Foucault has called "heterotopias." Heterotopias are physical spaces in which people combine multiple social activities, often placing them side-by-side in uncertain and unsettling ways.[51] However, it should be pointed out, these revolutionary heterotopias were also *homosocial*, as well. These spaces allowed young men to indulge in masculine display and forge fraternal, exclusionary bonds, something akin to the exclusively male political clubs that proliferated during the radical republic.[52]

Two such heterotopias relate to Salvage. The first appears with the studio work of the renowned neoclassical painter and radical revolutionary, Jacques-Louis David. As Thomas Crow has shown, David had long used his studio to promote a fraternal and egalitarian spirit among his pupils.[53] In 1794, right after he was released from political prison, David returned to the figure of the male nude, almost as though he was trying to make a memento of the famous Jacobin image that had portrayed the French people as a triumphant Hercules.[54] As part of his pedagogical program, David had his students start the morning's lessons by drawing the male nude. When his studio could not afford to pay professional models, reportedly the students took turns taking off their clothes and posing for each other. This morning ritual was captured in several representations of David's studio from the time, as with Léon-Mathieu Cochereau's *The Studio of Jacques-*

Louis David (1814) (fig. 6.11). In her study of David's postrevolutionary work, Ewa Lajer-Burcharth argues that David put the male nude at the center of a whole network of affective relations. He taught his pupils in this way so that he might continue his aesthetic-political quest to discover both ideal beauty and a more profound sense of fraternity. In so doing, David fostered "a surrogate world to recreate what the artist had lost with the fall of the Jacobins."[55]

By 1800, these fraternal ideas and practices had permeated medical circles. Like David's pupils, young physicians sometimes gathered around a central male personage, one who served both as a teacher and a leader. This person acted less as a father figure than as a first among male equals, something akin to an older brother. This quality appeared with the young and brilliant Xavier Bichat, who had pioneered several medical fields, including histology, pathological anatomy, and experimental physiology. Charismatic and driven, Bichat attracted hundreds of young students. His public and private life was filled with dismembered bodies and macabre medical experiments. His apartment, like Salvage's, was stuffed with human remains. His students attended guillotinings together so they could study how the body reacted to violent death, and at night they raided the graveyards to scavenge for cadavers. In many ways, Bichat and his pupils turned transgressive social behavior into a fraternal bonding experience for medical students, who were often culled from solid bourgeois backgrounds. And so when Bichat died precipitously—perhaps, like Salvage, infected by his rotting specimens—his young students cast him as a Romantic hero whose feverish genius had consumed his body and soul. One eulogy was written by Pierre Suë, the artist-anatomist who had so influenced Salvage's ideas of skeletal structure.[56] Given this web of associations, it is possible that Salvage had also attended Bichat's lessons, and they may have inspired his own work methods.

An intimate and passionate pathos infused Bichat's circle. Louis Hersent captured this quality in his Salon painting, *The Death of Xavier Bichat* (1817) (fig. 6.12). In this deathbed scene, Bichat was surrounded, not by family members or older colleagues, but rather by two of his young pupils, Esparron and Roux, both of whom dissected his body as soon as he died. As Bichat languished in his delirium, one student contemplated the medical still life in the left foreground, perhaps meditating on medical impotence in the face of death, while the other tenderly touches Bichat's fevered brow. In some ways, Hersent took the massive commemorations of the great revolutionary martyrs, such as David's *Marat* and *Le Peletier de St. Fargeau*, and instead portrayed how a small fraternal group experienced sacrificial loss. One critic described the painting in sympathetic terms: "Everything is simple, true, and pathetic in this painting; everything is severe, like the subject itself."[57]

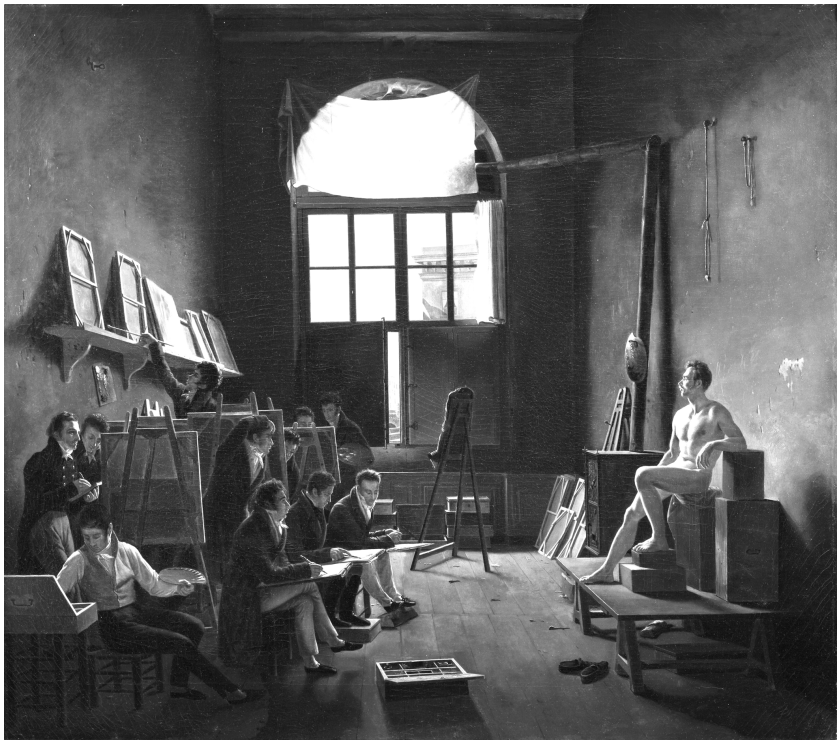

FIG. 6.11. Léon-Mathieu Cochereau, *The Studio of Jacques-Louis David* (1814). Oil on Canvas. 35 7/8 x 40 1/2 in. Courtesy of the Los Angeles County Museum of Art, Gift of the 1993 Collectors Committee. AC1993.19.1. Photograph © 2009 Museum Associates/LACMA. Cochereau captured how the male nude figured at the center of David's studio instruction.

I have drawn out these analogies with David and Bichat to suggest that this same fraternal idealism also infused Salvage's work and informed how he and his associates worked on the *Gladiator* project. Unfortunately, scant evidence exists about the people who frequented Salvage's home studio. Both Emeric-David and Julien-Joseph Virey worked with him, as well as the cast-maker Andrea Getti, yet his other artistic colleagues and student acquaintances are unknown. Salvage's dissection practices paralleled those of Bichat, and it is a good bet that Salvage's circle engaged in the same antics. One also wonders if any of Salvage's comrades took cues from David's studio and posed for him, especially since he lacked the money to pay professional models.

One can find evidence about Salvage's drive and intensity in his official obituary published in the *Moniteur universel* in 1813, which was penned by his friend and colleague, Virey, a person whose own work contributed so much to the proliferation of medical genres and subgroup formation in the postrevolutionary period. Strikingly, Virey eulogized Salvage much as Hersent later portrayed Bichat, but also emphasized his quixotic quest to find ideal forms. In his words:

> [Salvage] had passed more than ten years in the midst of the many cadavers that he was dissecting and molding, which he traced with an exactitude so scrupulous and so severe, and which he represented the organs with a realism that was so striking. How often did we not see him surrounded by this sad debris of death? What indefatigable perseverance did he not demonstrate, working day and night, braving the most deadly miasma that so often threatened his health? Nothing stopped his ardent love for his art, and it is in the excessive nature of this work in which he first planted the seeds of the disease which would carry him to the grave.[58]

For his part, Salvage best represented his views on art and fraternity in the frontispiece to his *Anatomie du gladiateur*. In this engraving, Salvage portrayed himself draped as the healing god Asclepius—who had tried to resurrect the hero Hippolytus—and holding copies of his illustrated *Gladiator*. He faced an altar upon which sat a bust of Athena, patron goddess of wisdom and of the arts (and who was also the avatar of the National Institute, Salvage's patron). On the altar appeared the tools of the artist's trade: a palette, brushes, a mirror, a compass, and a chisel. Incense burned in front of the mirror, and the snake of Asclepius wound itself around the tripod. Hermes's caduceus leaned against the altar, and the entwined serpent gazed into the mirror of truth. The epitaph reads: "Art is illustrated by science. Science endures by art" (fig. 6.13).[59]

On the surface, the inscription confirmed Napoleon's cultural politics, as formulated by Emeric-David and his colleagues: great art required institutional and bureaucratic patronage, not personal liberty or expressive freedom. However, the relief on the other side of the altar presents another possibility, one more in line with the forms of male sociability that we have just described. On the anterior side of the altar, there is an image of Prometheus, the first sculptor and human benefactor who had dared to rebel against authority, with his endlessly regenerating liver being torn out. On the lateral side, there is an image of the artist's studio, in which appears a group of young students, all in the nude. One is molding the flayed human figure, whilst another, seated, is drawing the corpse. An observer looks over his shoulder and stomachs his disgust by plugging his nose. Two other men, clasped in an embrace, watch the scene. In the far left, under a bust of the *Apollo Belvedere*, another artist sculpts the *Gladiator*. Maybe this figure is supposed to be Agasias himself, at work in his studio, or maybe it is Salvage or one of his students at work on the anatomized cast.

Fig. 6.12. Louis Hersent, *The Death of Xavier Bichat* (1817). Bibliothèque Interuniversitaire de Santé, Paris. Hersent's salon painting personified the passionate fraternity experienced within Bichat's youthful medical circle.

In this frontispiece, Salvage conveyed a specific image of revolutionary fraternity, one in which men formed intimate bonds by experiencing art and science together. Here, young men set out in quest of an ideal yet found it instead in the real world of nature and experience. Salvage's image evokes, perhaps deliberately, an engraving found in the 1802 translation of Winckelmann's *History of Art*, which had portrayed two young artists, also in the nude, dissecting together (fig. 6.14).[60] So if the male body was not ideal, but rather real and material, revolutionaries could still make a utopian society of regenerated men: free and beautiful in body and spirit. In the postrevolutionary gloaming, they would realize these dreams not through mass politics but in the homosocial world of private associations.

One might conclude that Salvage personifies the moribund status of neoclassical art in the early 1800s. Barbara Maria Stafford has written that neoclassicism was "the onset of a *rigor mortis* of an anemic 'methodism.' … Its moral task—whether in anatomy, physiognomics, phrenology, literary criticism, or rationalist art theory—was to even out the odd."[61] Neoclassicism, according to this interpretation, abstracted human difference and diversity from the world of real flesh-and-blood experience and straightjacketed them in the neo-Platonic world of forms. By the French Revolution, artists had reified form and

beauty to the point that they entombed creative expression, having exhausted themselves in practice on visions of the Antique past.

Fig. 6.13. Frontispiece from Salvage, *Anatomie*. Salvage's self-representation to his readers. Note the group dissection scene in the lower left on the altar.

Such a trend, potentially, appears in Salvage's work. In searching for neoclassical perfection, Salvage found himself at the grave itself, digging up the dead and "anemic" forms of classical greatness—which, in the end, poisoned his own body. Like Thomas Mann's *Death in Venice* (1913), Salvage offers an aesthetic lesson about the dangers of searching for perfect form. Salvage appears, *avant la lettre*, like a real-life Gustave von Aschenbach, who had ogled another paragon of classical beauty, the young Tadzio, on a beach in Venice. Now contemplating beauty is a wonderful thing, Mann's parable says, but do make sure the strawberries you're eating won't kill you.

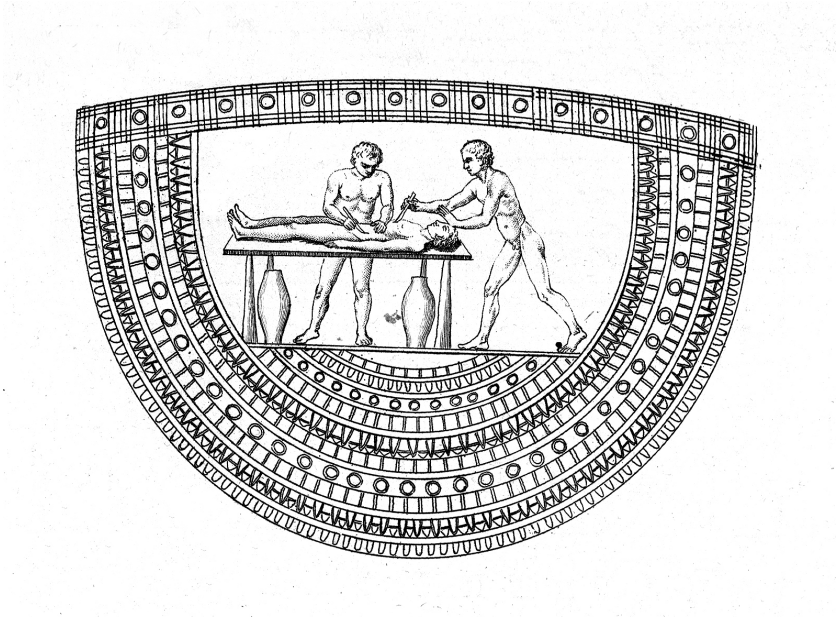

Fig. 6.14. Image from *Histoire de l'art chez les anciens, par Winckelmann; traduit de l'allemand; avec des notes historiques et critiques de differens auteurs*, 3 vols. in 2 (Paris: chez Bossange, Masson et Besson, An XI–1802). Bibliothèque Interuniversitaire de Santé, Paris. The vision of antique dissection inherited from Winckelmann's art history.

Perhaps this parallel with the fictional Achenbach has merit. If any neoclassical artist was working in the dead world of aesthetic form, it was Salvage. What is more, an obsessive element was driving his work, causing him to seek an abstract ideal in death itself. However, we need to distinguish between classical "anemism" and what Salvage was trying to do when he appropriated ideas about physical and moral regeneration. In searching for perfect form, Salvage wanted less to obliterate "difference" (as Stafford calls it) as he wanted to reclaim a lost sense of freedom and fraternity. He sought not just aesthetic beauty yet a sensuous political life as well. Like many of his radical cohorts, however, Salvage's quest sometimes became almost compulsive. With his dead figures, Salvage pointed to a deep-seated crisis in representing the male figure, in which neoclassical painters fixated on homoerotic ephebes and dying or disfigured heroes.[62] It also recalls, in jarring ways, how revolutionaries had used the actual bodies of martyred heroes as set pieces in their festivals and rituals—again, this was the case with J.-P. Marat and Le Peletier de St. Fargeau—as though displaying these rotting corpses could make the social body whole and pure again.[63]

In powerful ways, then, Salvage risked all to find a political and aesthetic ideal in the medical undercurrents of the postrevolutionary decades. He braved sickness and rot to discover whether ideal masculinity really existed, both in nature and in society, just as its essential precondition—democracy—had also been there for the taking, too. However,

once a military dictatorship had stripped its citizens of active rights, they were left with nothing but to withdraw into an intimate world of private associations, a secret world in which they might relive their memories of revolution. And it was in this secret world, this realm of morbid undercurrents, that Salvage tried to stitch together, quite literally, the broken dreams of a revolutionary past.

CHAPTER 7

The Mesmerist Renaissance

Medical Undercurrents and Testing the Limits of Scientific Authority

While Jean-Galbert Salvage was busy molding his morgue specimens in his Paris apartment, other odd developments were afoot in the department of Aisne in the Hauts-de-France. In 1807, Amand-Marie-Jacques de Chastenet, the Marquis de Puységur (1751–1825), a former aristocrat and artillery officer once stationed in Strasbourg—he was also an amateur playwright and librettist—published two unusual books: *Du Magnétisme animale, considéré dans ses rapports de la physique générale* and *Procès-verbal du traitement magnétique d'une femme malade*, the latter which documented the story of a young woman under his care. These two books stunned literary and scientific audiences and sparked a large public debate among leading doctors and intellectuals that persisted until the 1830s. It was not the first time that Puységur published on animal magnetism—he had embroiled himself in the bitter mesmerist controversies of the 1780s—but these new books roused Parisian intellectual circles in striking ways, becoming part of the expanding world of medical subcultures and writing genres. Puységur raised vexing questions about mind and matter that defied simple scientific resolution and seemed to get to the heart of passionate concerns about the role of will and imagination in the making of natural reality.

Puységur presented a simple thesis. Animal magnetism—that scandalous theory proposed by the physician and alleged charlatan Franz Anton Mesmer back in the 1770s

and 1780s—was no myth. Instead, said Puységur, animal magnetism was a real and demonstrable force that manifested itself in specific therapeutic sessions. This distinct magnetic state, he went on to say, empowered the patient and gave them unprecedented control and understanding over their bodies: it could illuminate the pathogenesis of disease, allowing people to discover *for themselves* what made them get sick and thus prescribe the best treatments for themselves. And for patients to enter into this self-diagnostic state, said Puységur, "I had no need to follow any [scientific] law, nor adopt a new system, and only the act of my will sufficed to determine the effect of my power."[1]

With these words, Puységur resurrected the mesmerist controversy that had once embroiled the intellectual world of Old Regime France and which, in the eyes of many savants, had been declared dead and buried after scientific academies had condemned it in 1784. This "mesmerist renaissance," as I shall be calling it, inaugurated the last but most extensive serious public debate, within medico-scientific circles, about the veracity and efficacy of animal magnetism. Puységur both inspired and divided learned opinion on the powers of the human imagination and how these powers could shape how people experienced, not just sickness and pain, but natural reality itself.

When historians have studied the mesmerist renaissance, they have often presented it in one of two ways: first, as part of the story of medical professionalization, in how doctors approached irregular medical practices and how they adjudicated competing claims about medical authority and expertise;[2] or second, as an episode in the history of dynamic psychiatry, in which Puységur and his followers become well-meaning but misunderstood pioneers who inadvertently stumbled upon the unconscious mind and thus helped give birth to psychoanalysis later in the nineteenth century.[3]

In what follows, I show that the mesmerist renaissance is a significant part of this story about medical subcultures, genre, and readership, above all in how these undercurrents channeled medical ideas and languages, both licit and otherwise, into the larger intellectual world of postrevolutionary France. Here, the story increasingly shifts to the contested political decades of the 1820s and 1830s.

Three factors shaped the mesmerist renaissance. First, significant thinkers preoccupied themselves with the powers of the human will and the imagination—notably the Marquis de Sade, François-Pierre Maine de Biran, Joseph de Maistre, and Joseph Joubert—all of whom explored how the mind could master and then transform natural reality.[4] Further, new currents of spiritualist and mystical thought, especially those strange human experiences that seemed to escape rational scientific explanation—such as delirium, visions, ecstasy, catalepsy, epilepsy, hysteria, hypochondria, dream-states, and sleepwalking[5]—helped feed the mesmerist resurgence, because they focused new attention upon otherworldly or fantastic inner states of being.[6] "Sensibility," one of the great literary-scientific ideas of the Enlightenment, remained paramount in this discourse.[7] Lastly, the mesmerist renaissance capitalized upon the diffusion of medical genres and subgroups in the French cultural scene, tapping into radical and non-conformist attitudes at a time of deepening political and religious reaction.

In the debates after 1800, the new mesmerists sought to naturalize spiritualist concerns, using medical science to explore metaphysical questions about human agency and experience. Mesmerists sought a heightened sensory experience by juxtaposing the

otherworldly and natural reality: "natural supernaturalism," as Meyer Abrams called it in his magisterial study of Romantic thought.[8] They believed that the marvelous could exist in the natural world and that observers could explain these ecstatic states by using natural science, so long as medical practitioners remained sufficiently open-minded about metaphysical experiences. More to the point, they insisted that anyone could learn mesmerist techniques—much as physiognomists and sex writers had said, too—and thus stripped the practice of all the ritual and garish paraphernalia that Franz Anton Mesmer himself had used in his treatments. In principle, at least, personal charisma was removed from the equation (though figures such as Puységur clearly relied upon this quality).

In this sense, the new mesmerists dealt less with occult forces and harmonic fluids (as Mesmer had first believed) than with what they thought to be the boundless powers of the human mind and imagination. And it was these elusive powers, they said, that the doctor must try to understand and then use. Herein lay the reason that animal magnetism strongly attracted key medical and lay minds in the postrevolutionary decades. While the original Mesmer controversy had garnered some scientific support in the 1780s—notably from the chemist Charles-Louis Condamine, the explorer Charles-Marie de La Condamine, the naturalist Antoine-Laurent de Jussieu, and the physician Charles Deslon[9]—the mesmerist renaissance of the early 1800s was characterized by greater interest from medical practitioners and other serious philosophers, literary types, and scientific authorities. Stefan Zweig once observed that Mesmer's paradox was that "he came too early and came too late,"[10] but the mesmerist renaissance inaugurated by Puységur could have only happened in the cultural anarchy and porous medical world of the postrevolutionary period. It spoke to its particular political and intellectual moment.

The seeds of the new mesmerist saga were sown shortly before the French Revolution, as part of the larger tradition of "prophetic science" and neo-natural radicalism associated with J.-J. Rousseau, Denis Diderot, and J.-P. Marat, among others. In 1784, two academic reports, both requested by King Louis XVI, officially closed the door, at least on paper, on mesmerism and animal magnetism in the scientific world of the Old Regime. The first report was authored by the Académie Royale des Sciences and boasted impressive signatories such as the astronomer J.-S. Bailly, the chemist Antoine Lavoisier, the health crusader Joseph Guillotin, and the American polymath Benjamin Franklin (then residing in France to drum up support for the American Revolution). The second report came from the Académie's younger partner, the Société Royale de Médecine, and it was written by prominent medical reformers such as Félix Vicq d'Azyr and M.-A. Thouret. The commissioners also provided a third, private report to the king—this one marked top secret—in which they denounced the salacious and immoral elements they had identified in mesmerist practice.[11]

Without doubt, the royal government hoped that the academic reports would squash the debate over mesmerism, a debate that had started seven years earlier and had inspired over two hundred published works, all of which had inveighed against the supposed merits or dangers associated with mesmerist theory and practice. The whole affair had begun when the physician Franz Anton Mesmer arrived in Paris in 1777 and ignited controversy with his spectacular healing regimens and purported cures. Mesmer had

already earned himself notoriety on the European scene. Born in Konstanz, he later moved to Vienna, where he studied medicine and began moving in intellectual and artistic circles. For a time, he even shared his musical ideas with Joseph Haydn and Wolfgang Amadeus Mozart, but soon his unconventional treatments and alleged impropriety with patients—particularly young female patients—forced him to abandon the Hapsburg lands.[12] From there, he went to Paris—always a stylistic Mecca—and soon he attracted a vast clientele from fashionable circles. For a while, he enjoyed the tacit patronage of Queen Marie Antoinette.[13]

Mesmer espoused an unusual therapeutic theory and practice. According to him, a universal fluid existed in nature—a mix between the Newtonian ether and the so-called animal spirits that many doctors said existed in the nervous system—and this universal fluid determined all states of health and disease in the body. The individual became sick when the body's magnetic fluids became unbalanced, and so the doctor's job was to restore harmony between the individual and the universal fluid, thereby making her or him healthy once again.

To restore this harmonious state, Mesmer promoted a stunning but scandalous therapeutic regimen. In his treatment chambers, Mesmer built a wooden tub which he filled with water and then placed in it oddly bent or twisted metal rods—rather like a flower arrangement in a vase—and he used an iron rod to magnetize the whole contraption. Next, he seated his patients all around the tub, having them hold hands or connecting them with silken cords. He darkened the room and played gentle music. During this time, Mesmer approached his patients one by one, sometimes touching them on their heads or chests, sometimes serenading them with his water harmonica (an instrument which he could play well). With these techniques, Mesmer produced a highly sensible state within his patients, one that climaxed in a convulsive crisis. Once patients had navigated this state, they found themselves serene and healed from whatever ailment they had suffered.[14]

Needless to say, Mesmer's critics were unnerved by this spectacle and its mix of irrationality, convulsive display, and group eroticism—his treatments raised all sorts of concern over sexuality and female gender roles[15]—and the royal government set out to refute his ideas and curtail his medical practice. Though Mesmer's technique was heavily stylized and ritualized, it also drew upon more legitimate scientific techniques associated with electrical and magnetic experiments, and this is what worried them.

When investigating magnetic therapies, the royal commissioners focused upon two elements of Mesmer's theory and practice. First, they questioned Mesmer's claims about a universal magnetic fluid that governed all health and pathology; and second, they demurred the validity of the cures that many of Mesmer's patients claimed to have experienced.

In both cases, the commissioners insisted that Mesmer's claim about a universal magnetic fluid lacked empirical basis, and they further used double-blind experiments to show that Mesmer's treatments were fake. The commissioners concluded that Mesmer's cures—if they existed at all—were caused by autosuggestion, imitation, or, worse yet, the patient's imagination itself.[16] In 1784, this judgment wounded not simply Mesmer's standing but also struck him where he was most vulnerable: his pride. Mesmer, it should

be noted, always presented himself as a man of the Enlightenment, one who was working within the rigorous world of natural science and experimentation. So for the commissioners to dismiss his scientific validity by attributing his cures to "mere" imagination dealt a terrible blow. Mesmer was worse than a quack, the academicians concluded; he was self-deluded, someone who failed to see what was going on under his nose.[17]

Despite these humiliations, Mesmer's disciples continued to grow and to divide themselves into sectarian groups, each claiming to interpret the prophet's original revelation in more elaborate ways. For example, Mesmer's follower Charles Deslon created an independent treatment center to accommodate patients and even raised 400,000 pounds to finance it (an astronomical sum in Old Regime France). Similarly, two of Mesmer's other devotees—Nicholas Bergasse and Guillaume Kornmann—created another network of mesmerist clinics called the Société de l'Harmonie Universelle. By 1789, the Parisian Harmonic Society alone boasted over 430 members and Bergasse and Kornmann opened branches in over twenty-five towns in France, including Nantes, Bordeaux, Grenoble, Dijon, Marseilles, Nîmes, Castres, and—most important for our purposes—Strasbourg, where the Marquis de Puységur was stationed with his artillery regiment. At the same time, these Harmonic Societies networked with Masonic lodges, and members intermingled with other spiritualist or occultist groups, including those founded by that other dubious adventurer of the Enlightenment, Alessandro Cagliostro. Meanwhile, in Lyon, mesmerists were drawn into the web of Martinist spirituality, and some members combined Mesmer's doctrines with Swedenborgian mysticism.[18]

By the outbreak of the Revolution, then, official disapprobation had ruined Mesmer's scientific respectability, but the movement persisted within urbane circles. In 1786, one commentator complained: "Mesmerism is no more than a game. Men, women, and children: everyone involves themselves, everyone magnetizes."[19] Mesmer himself, as Laurence Brockliss and Colin Jones have emphasized, had cultivated this apostolic dynamic, promoting a "thaumaturgical strain" that evoked the healing prerogative of the Bourbon kings, all who had gone out after their coronation to cure scrofula with the "royal touch." Now, such sacred function was in the hands of everybody.[20]

It was in this contentious intellectual setting that, during in the winter and spring of 1783–1784, the Marquis de Puységur, alongside his younger brother Maxime, entered the mesmerist fray. The Puységurs were an old and respected aristocratic family, one whose pedigree ran back to the Middle Ages and one whose members had long been presented at the royal court at Versailles. Their ancestral holdings were situated in northeastern France, in the small commune of Buzancy, near the town of Soissons. It was in this idyllic country setting that the Puységur drama began to unfold.

In the early 1780s, Puységur found himself drawn to the mesmerist controversy. One can imagine Puységur as a bored but earnest young aristocrat, imbibed upon Enlightenment ideals and high society fashion, and eager to apply progressive ideas about improvement and *bienfaisance* within his ancestral estates. Mesmerism gave him an outlet for these aspirations. So he informed himself about all the competing doctrines, trying to master the various techniques, and then he tested them upon the local villagers and

peasants.[21]

At first, Puységur followed Mesmer's teachings, including his elaborate rituals, trying to magnetize sick and needy people. He claimed early success, notably in alleviating symptoms of toothache and phthisis. As word spread through the commune, Puységur was inundated by common people begging him to cure their sicknesses, and he was unable to accommodate their demands. In May 1784, Puységur took an unusual but dramatic step. Rather than using more of Mesmer's tubs and rods, Puységur went out and mesmerized something unexpected: a giant elm tree, situated in the center of Buzancy, a tree which constituted one of the great natural monuments of the little village.

Though magnetizing a tree was bizarre, even by Mesmer's standards, Puységur insisted that he chose the object for sound scientific reasons. According to him, the tree was in full bloom and so its animal electricity—a quality that stemmed from nature's "magnetic-vegetal" force—was at its highest peak. In this regard, Puységur was drawing upon the Savoy physician and chemist, Claude-Louis Berthollet, who had analyzed the electrical elements found in plant life, and whose ideas, it seemed to Puységur, validated Mesmer's theory about a universal magnetic fluid (Berthollet had supported Mesmer in his feud with the Académie des Sciences and the Société Royale de Médecine).

One of Puységur's ardent followers, a local tax collector named Clocquet, described his magnetic elm tree. It was, he said, an "ancient tree, immense but still vigorous," over whose roots flowed a fountain of limpid spring water; a tree venerated by the village elders, who gathered below its branches on feast days or on other communal festivities and chatted about the new harvest or upcoming vintage; a tree around which youngsters gathered and gossiped and danced their rustic dances or courted one another. It seemed full of some primal vitality, its firmament holding memories of past lives and tradition, as if its hulking frame rooted the village community itself. Clocquet wrote, "This tree, magnetized since ancient times by the love of pleasure, is now magnetized by the love of humanity. Messieurs de Puységur have imprinted upon it a salubrious, active, and penetrating virtue."[22]

Puységur soon stumbled upon another phenomenon. As he gathered his patients around the old elm, he noticed that some of them fell into a stranger state—and this happened *after* he had magnetized them. It was, he said, a form of nervous crisis, almost cataleptic in scope. These peculiar people seemed possessed by some inner light through which they could probe the innermost regions of their minds and body, seeing what caused their sickness and what they needed to do to heal themselves. More strikingly, these people could see into the insides of *other people*, as well, diagnosing them more accurately than any practicing physician could ever do. Puységur cited three of these clairvoyant individuals: a young man and women by the names of Victor Race and Agnès Rémont, as well as a sharecropper from Puységur's estate who was called Lehogais.

The scene unfolded as follows. Sometimes, when the patients thronged around the elm tree, a few of them would break free of the magnetic chain and begin wandering off. At these moments, Puységur would approach his followers and would lay hands upon them at random, touching them with his magnetic rod. The person fell at once into a state of stupor, something like deep sleep, "during which the physical faculties seemed

suspended"—but here "for the profit of the intellectual faculties."[23] Puységur alone could touch or communicate with them.

In this state, something amazing transpired between Puységur and the patient. The magnetized person seemed filled by an intangible sixth sense, a heightened state of awareness. Puységur called this state "prudent," "deep," and even "clairvoyant"—and he gave it a specific name: *somnambulism*.[24] It was different from traditional understandings of somnambulism, which had been described, in the classic sense, as "sleepwalking" or when people performed complex intellectual or manual activities—manual labor, writing, contemplation—when sleeping or unconscious.[25]

For Puységur, somnambulism provoked a sensible state, an intense inner feeling and openness akin to those states described in the sentimental novels of Samuel Richardson and J.-J. Rousseau. Puységur described the young Victor Race as follows: "his heart poured forth; he wanted, he said, that one could reveal it so to see how he was filled with goodwill and gratefulness; we could not hold back our tears of admiration and sensibility in hearing Nature's voice reveal itself with such candor."[26]

Once in this state of somnambulism, Puységur sent Victor and Agnès among his other patients so that they might also gaze into their bodies and diagnose their maladies and thus prescribe an appropriate regimen. The somnambulists would remain in this state for several hours, talking with other patients and touching them, while all along keeping their eyes firmly shut, as though they were sleeping. Like Cesare from Robert Wiene's famous Expressionist film *Das Cabinet des Dr. Caligari* (1920), the somnambulists would go anywhere and do anything their "master," Puységur, told them to do. And they remained in this state until "it pleased the Master to discharge them and return them to their natural state"—at which point Puységur would touch their eyes with his fingers and tell them to go "embrace the tree."[27] They then awoke from their stupor, happy and rested, but with no memory of what had transpired. Puységur exclaimed: "How often, [did I find myself] astonished and surprised … even exalted by the effects of which I was the cause, full of thanksgiving for Mr. Mesmer, author of a discovery so useful to humanity in every respect!"[28]

Nonetheless, something had changed in mesmerist theory. While Puységur acknowledged his debt to Franz Anton Mesmer—and for a time continued to promote his idea of a universal magnetic fluid—he began to transform the older therapeutic approach. One day, when he was magnetizing a young woman named Catherine, who was suffering from gastroenteritis, he stumbled upon another unusual state: "How great was my surprise in seeing her, in the course of *two minutes*, entering, under my hands, that same state of *somnambulism* that the tree had put her!

> I was for her a real *magnet*; my finger alone sufficed to *direct* her, to *move her*, to *make her sit down* where I wanted her, *without saying a single word to her*; finally, I exercised upon her, *as I wanted*, all the extraordinary phenomena I had seen you yourself produce [*sic*].[29]

In a flash, Puységur grasped that he himself had become the efficient cause of the somnambulist state. For him, this insight proved crucial. He no longer needed Mesmer's

elaborate tub with all the protruding metallic rods, magnetized water, magic wands, and musical effects. Further, he could safely dispose with the convulsive magnetic crisis that Mesmer had thought so salutary and which had elicited such strong moral backlash from academic authorities. Most of all, Puységur did not even need his old elm tree.

No, said Puységur, the mesmerist needed but one thing: the will to magnetize other people. This will alone sufficed to put someone in a state of somnambulism. It alone was "the principal motor behind magnetism."[30] Armed with this insight, he described mesmerism in three terms—thought, willpower, and action[31]—until he distilled it to his simple creed: believe and want [*croyez et veuillez*]. It became his mantra, repeated throughout his post-1800 writings, and one which he always inscribed, in his bold but elegant script, in the books he dedicated to his readers and patrons.

Puységur's disciples hailed somnambulism as one of the greatest discoveries to emerge from mesmerist theory and practice and then set about documenting other cases. (By 1819, Puységur's erstwhile propagator, the respected naturalist J.-P.-F. Deleuze, claimed that over two thousand somnambulists had been observed in the course of medical practice.[32]) Astonished observers claimed they had never observed anything quite like it: somnambulism constituted something new in the annals of medicine. What fascinated them, above all, was what somnambulism suggested about the inner life of feeling and thought and the kinds of self-knowledge that could be attained from it.

According to one such partisan, Jean-François Fournel, the somnambulist displayed distinct symptoms. Somnambulism was "a middle state been *sleep* and *waking*, which participates in both, and which also produces a large number of phenomena which belong neither to one or the other" [*sic*].[33] Somnambulists seemed unaware of the external world around them, as though they had become thoroughly abstracted from all human and natural surroundings. "The sick person being put in a state of *somnambulism*, it causes within him or her a disorganization that disrupts the equilibrium of the *senses* in such a way that some of them experience an extreme degradation while certain others acquire a prodigious degree of refinement" [*sic*].[34] In this state the magnetizer and the somnambulist developed an intimate relationship with one another, communicating in the most discreet manner, not just with word or gesture, but also by wordless thoughts—as if by telepathy. Moreover, the magnetizer could transfer this power to another person, who then became the "new director" [*nouveau directeur*] over the somnambulist.

Those people who possessed this "prodigious degree of sensibility," as Fournel described it, entered a mystical, trance-like state of being. This condition differed from the physical states witnessed in religious sects such as the Jansenist convulsionaries or the Quakers and Shakers in the Anglo-American environment—as well as the hysterical crises witnessed in Mesmer's therapeutic chambers. Instead, the somnambulist state resembled the profound solitary experiences associated with deep prayer, meditation, or silent emotional absorption. Accordingly, somnambulism intimated a new sensory experience: "In some of them, a sixth *sense* seemed to have revealed itself by an extreme extension of the *intellectual* faculty which surpassed the usual ability of the human spirit" [*sic*].[35]

Building upon these ideas, another of Puységur's disciples, A.-A. Tardy de Montravel,

claimed that somnambulism amplified something he called an "interior sense" [*sens intérieur*]. Through this means, the magnetizer and the magnetized could see deeply into mind and body and thus identify pathological processes which "doctors have never suspected."[36] Tardy documented a case in which he had magnetized a young woman of lower-class origins, one who knew neither how to read nor to write, but who in a somnolent state performed miraculous feats of diagnosis, describing in correct clinical detail—or so he said—a whole range of illnesses experienced by herself or other people.[37]

To explain how the somnambulist achieved this visionary state, Tardy indulged his readers with some far-flung theories of mind and matter. As he described it, people possessed three levels of physical and moral experience. The first level involved the purely material activities of the organism, which he associated with base animality, such as digestion or respiration. The second involved a "sixth sense," which, though physical in nature, was associated with mind or consciousness. Then there was the intellectual world, which he ascribed to an immaterial and immortal soul. This "sixth sense" mediated between the animal (the physical) and the intellectual (or immaterial) parts of human experience. It might constitute part of the soul, he speculated, but it was grounded in material nature.

In somnambulism, this sixth sense came vividly to the forefront, dominating all the other physical and moral functions. The somnambulist could fix his or her sensory attention upon certain objects, clearly and lucidly, and in an unmediated fashion, thereby bypassing the normal workings of the brain and nervous system. Through this means, the somnambulist could penetrate physical and mental processes, identifying what caused sickness and health.

Like Fournel, Tardy believed this sixth sense—"which had not been known before"—resembled what naturalists called *instinct*. "Like instinct," wrote Tardy, "[the sixth sense] is never mistaken with the individual's functions, conditions, and physical needs."[38] It was, as he went on to say, "like a sense that affects and penetrates the entire interior of man, in absolutely the same way that regular touch feels its covering."[39] Understood this way, somnambulists did not so much understand these organic processes rationally as they grasped them intuitively, and it was this intuitive faculty that allowed them to make diagnoses and even prognosticate.

Somnambulists thus possessed special skills. They could identify the best way to treat a sickness (whether by medical art, or by unconventional therapeutics, or by letting nature take its course); they could indicate what kinds of remedies to use or which ones to avoid; and they could predict, often with uncanny precision, the exact time and circumstances under which the sick person was healed. In a striking metaphor, Tardy likened the somnambulist to a clock that could calculate time for itself. He selected this mechanistic metaphor with care. Like Puységur, Tardy insisted that somnambulism was neither sorcery nor divination. Rather, as Mesmer had claimed all along, animal magnetism was a natural science, one that was in perfect harmony with scientific objectivity.

But practitioners such as Puységur and Tardy then went on to say that animal magnetism differed from the rarefied world of medical science because it was open to everyone, their social rank, education, sex, or professional status notwithstanding. Like

the earlier *prophètes–philosophes* or postrevolutionary physiognomists, who had celebrated the Rousseauvian "everyman," the new mesmerists insisted that each person could cure by animal magnetism. There was one problem, however. People struggled to hear the healing voice of nature because social artifice had confounded their instinctual and intuitive responses to sickness. People had thus lost the capacity to look inside their bodies and see what *really* made them sick. Tardy observed, "Instinct is always sure within all the animals. It would be the same for mankind, if he was less suffocated by the different and sometimes contrary directions that he receives from his soul or his reason."[40]

Though somnambulism empowered people to recover these primitive qualities, the new mesmerists seldom celebrated a "liberated" instinct and they distinguished between the animal world and that of human experience. As Tardy explained, animals and insects experienced instinct as something self-evident. There was no reflection behind it. Instinct commanded, and the body obeyed. Birds, beasts, and bugs—none of them doubted their instincts. That's because they did not *think*. Not so with humans. Humans, Tardy maintained, were different. Humans might feel the call of nature, but they always had to think and to reflect and to judge. At times, people became indecisive or they vacillated, caught between instinct and reflection. Yet this inner conflict was a good thing. Reflection elevated the human above the beast and gave individuals moral dignity. By contrast, neither animals nor insects could discern or calculate or make moral decisions. Instinct controlled them and determined how they behaved. Instinct foreclosed freedom.[41] That said, however, humans struggled to balance their instincts and their reason, and this struggle confused them. People were unable to understand their primitive impulses and so they found themselves second-guessing everything. Fortunately, somnambulism could meliorate this conflict between the head and the heart and reconcile reason and instinct.[42]

For these reasons, the new mesmerists refused to conflate somnambulism with some netherworld that lurked deep within the self. Nor did they treat it as the realm of animal instinct, one that was simply waiting to be liberated. The new mesmerists eschewed the bestial, emphasizing that the somnambulist could still reason, compare, judge, and understand (though the faculty of memory always seemed hazy to them). Moreover, in the somnambulist session, both the magnetizer and the magnetized understood what was going on, though the latter might forget what had happened. This state was neither unknown nor profoundly "other," constituting an unconscious experience. For mesmerists such as Puységur, Fournel, and Tardy, somnambulism revealed a physical experience that was both tactile and mentally accessible—conscious, in other words—yet something that had been overlooked by previous explorers of the mind.

More to the point, somnambulism offered a heightened state of physical sensibility, one in which people could put their nervous system in dialogue with that of another person. In this openness toward feeling and sensation, they wanted to harmonize with other people and understand what they felt and thought. And by emphasizing personal dialogue and harmony, the new mesmerists entered the mysterious world of interpersonal relations—why we are drawn to some people and why others repel us—and why our relations with some people leave us feeling happy, fulfilled, and healthy.

Physiognomists, as we've seen in chapter 4, had also tried to answer this question. For Puységur and his fellow travelers, it was Mesmer, more so than Johann Kasper Lavater, who opened intellectual doors for them, giving them "the key to an infinite number of phenomena that are still for us impenetrable mysteries."[43] It was at this point that Puységur's new mesmerism overlapped with other medical genres and subgroups in the early 1800s.

At first, in the 1780s, the somnambulist discoveries failed to catch on. Puységur's work was lost in the much broader public controversy over mesmerist practice, and his magnetic tree stretched the credulity and patience of sympathetic observers. It was important that Puységur's first books—alongside the writings by Fournel and Tardy—appeared in 1784, right when the Académie des Sciences and the Société Royale de Médecine published their damning inquests on mesmerist practice, denouncing the whole affair as quackery and fraud. Perhaps cowed by this public tongue-lashing, Puységur withheld from publishing any new case studies, though he still participated in the Harmonic Societies in Strasbourg, where he was stationed in the artillery corps. But events soon outpaced the mesmerist drama, first with the foreign war, and then with the Terror. The Puységur family found themselves in danger on account of their aristocratic pedigree. Yet whereas Puységur's younger brother and fellow mesmerist, Maxime, fled France, he remained behind, and he was imprisoned, alongside his wife and children, during the Terror. Amazingly, all of them survived; nor was Puységur deprived of his ancestral estates.[44]

To understand Puységur's celebrity status in the early 1800s, we must step back and look at other strange medical currents and alleged discoveries from the 1780s. This discovery came from Lyon, which in the last years of the Old Regime had incubated many spiritualist, masonic, mesmerist, and Martinist sects. The key player was the physician Jacques-Henri-Desiré Petetin (1744–1808). Born in Franche-Comté, Petetin set up practice in Lyon after having taken his medical degree. He long studied neurological disease, especially hysteria, and he interested himself in electricity and in using galvanic devices to heal nervous disorders, above all with the elusive "vapors." In the 1780s, he corresponded with the Enlightenment arch-priest of nervous disease and sexual deviance, Samuel-Auguste Tissot, who even visited Petetin in Lyon during his tour of France.[45]

Like other unconventional physicians in the 1780s, Petetin found himself drawn toward the mesmerist controversy and the tantalizing relation between nervous diseases and the so-called crisis experienced in Mesmer's cures. Just when Puységur was discovering the somnambulist state, Petetin stumbled upon another bizarre phenomenon, one that doctors had identified before but which now acquired fresh meaning in wake of the mesmerist controversy: catalepsy. Originally, doctors had characterized catalepsy as a nervous stupor, one in which the patient became petrified, as though gripped by some Medusa-like force (this image of the gorgon often surfaced in the medical literature on the subject). In 1792, the *Encylopédie méthodique* defined catalepsy as "the abolition or rather the sudden suspension of sentiment and muscular movement" while the patient's pulse and respiration remained "free and natural." Strikingly, the person remained frozen in whatever position they had been affecting at the

moment the disease struck them. Unlike tetanus, the cataleptic's body remained supple and mobile and doctors discovered that they could manipulate it at will: they could, for example, extend the arms or the legs, raise the head or push it down, or twist the body all about in whatever position one desired—almost as though the cataleptic was one of those wood figurines used in the drawing classroom. When the cataleptic attack had passed, the person woke up as if from a deep sleep and remembered nothing of it.[46]

In 1787, Petetin published his first short book on the subject, linking the disease with somnambulism, but he transformed the original diagnosis. Characterizing the new form of catalepsy as a "suspension more or less complete and general of sentiment," he then added something shocking: the "transport of the senses." Here the cataleptic attack transfigured "the manner by which impressions are transmitted to the *sensorium commune*."[47] Like Puységur's somnambulists, the cataleptic received a form of second sight and could see their interior organs—and the interior organs of other people, as well. In this condition, cataleptics became diagnostic machines, identifying diseases within their bodies and then casting this preternatural gaze upon other sick persons. At times, the cataleptic could decipher thoughts and emotions in a process that bordered upon the clairvoyant or paranormal. Knowing that such claims stretched credulity, Petetin's later editors begged readers to indulge him: "Just because these facts seem impossible isn't a reason to deny them."[48]

For Petetin, the diagnostic breakthrough came in 1793, during the siege of Lyon, when he was caring for a sick young woman. She was roughly twenty years old and had long suffered from nervous disorders, including traditional forms of catalepsy, all compounded by tetanus and a "rigidité de tous les muscles."[49] Before the siege, he had treated her with cold baths and ice packs, both of which seemed to alleviate symptoms, but during the hostilities these luxuries became harder to procure. In despair, Petetin decided to give her shock therapy. He alternated positive and negative charges, which he sometimes administered when she was in bed and other times when she was in the bath. The young cataleptic seemed revivified, regaining both consciousness and sentiment.[50]

This initial breakthrough set the stage for further experiments. In Petetin's view, electricity transmitted all sounds and images within the body, becoming the primary medium for sensation. For these reasons, he rejected Mesmer's theory of universal magnetism; for him, galvanism suggested a more circumscribed and specific animating force in the body. Yet Petetin did not see sensation as localized in specific nerve receptors. Rather, the galvanic fluid seemed disseminated throughout the body in a manner redolent of the old Galenic theory of the humors. When it came to catalepsy, he speculated that the electrical fluids intensified in one part of the body, increasing a particular sense or sensory organ: touch, sight, taste, hearing, or smell. When this occurred, certain sensory qualities assumed prodigious, if not preternatural attributes—as seen with Puységur's somnambulists.

With catalepsy, however, the electrical impulses concentrated themselves in the gastric region, with bizarre results to follow. Petetin borrowed the well-known physiological theories developed by one of the key physicians associated with the Montpellier medical school, Louis de Lacaze. In *Idée de l'homme physique et moral*, which he published in 1755, Lacaze argued that the so-called epigastric region—the diaphragm—constituted the

body's vital center, which moderated the body's so-called phrenic forces or vital impulses.[51] In catalepsy, Lacaze's phrenic forces—which Petetin interpreted as electrical impulses—transformed the abdomen into the body's sensory center, overturning the body's usual nervous pathways into the extremities. The body then transposed the usual registers: the fingers, for example, could now "hear" and the abdomen could now "see." Moreover, the body could experience greater depth in feeling, sense, and intuition. And in this state, the Petetin's cataleptics—like Puységur's somnambulists—became diagnostic instruments for those who knew how to manipulate them.

Though Petetin aspired to explain catalepsy in scientific terms, he abjured a conventional or objective style when recounting his case studies. Instead, he incorporated novelistic forms, using dialogues, indirect discourse, and other imaginative techniques. In one case, he told about a nineteen-year-old woman, recently married, who had fallen into a stupor after a horrible bout of gastroenteritis. Understandably alarmed, the family summoned Petetin, who managed to resuscitate her. Nonetheless, she still could not hold down food and suffered horrid convulsions, from which she would slip into trance-like states and lose control of her normal senses. Meanwhile, she contorted her body into all sorts of bizarre positions and became violently hysterical. Strangest of all, her fingers and abdomen seemed able to hear and see, as if these body parts had transplanted her eyes and ears. The young woman began predicting the scope and timing of her cataleptic attacks, and then she went on to prognosticate about other people's sicknesses, notably with Petetin's blinding headaches. In Petetin's words, "a cataleptic and his doctor do not form more than a single individual, if the former doesn't often oppose the influence of the power born of his willpower."[52]

Petetin devised ingenious-seeming experiments to test her second sight. He puts various objects in closed boxes, but she guessed the contents anyway; the family formed itself into a galvanic chain so that the woman could transmit messages back and forth, literally "hearing" with her fingers; and she reported on conversations that were happening in Switzerland. Drawing upon the Enlightenment's favorite metaphor, Petetin remarked that "catalepsy transforms her into a statue who can hear."[53]

In a second case history, Petetin described another cataleptic hysteric—also from Lyon—whose symptoms seemed complicated by opisthotonos (muscle spasms). This particular cataleptic evinced the same symptoms as the first: contortions, stupefaction, and transposition of the senses. Petetin had found an analogous case in Tissot's best-selling *Avis du peuple*, but in this instance religion and political events entered his story. The young cataleptic had an aunt, a former nun, whose order had been dissolved by the revolutionary government. Increasingly paranoid, the aunt became convinced that her niece's cataleptic state was caused by demonic possession. Petetin endeavored to assuage what he characterized as the aunt's superstitious anxieties by including her in his therapeutic sessions, and soon both the former nun was speaking to her stupefied niece through her fingers and toes. Unfortunately, the girl's condition degenerated further in May 1793, as the civil war and terror spun out of control in Lyon. The violence shattered the girl's fragile nerves, showing, as Petetin saw it, the "the force of the mind on the physical."[54]

In his works, Petetin evoked wonder or new appreciation for the marvelous. He

remarked, with palpable enthusiasm, cataleptic patients "enjoy a supernatural memory and a perception that approaches divine intuition."[55] Yet he wanted clarify his scientific credentials and attitude. Catalepsy, he reiterated, was bizarre and it strained scientific belief. Nonetheless, he insisted that science could explain it in rational terms, studying its objective reality and divulging its natural pathogenesis. Nothing in these cases, he insisted, should evoke memories of the Loudon possession of the 1600s or the Jansenist convulsionaries of the early 1700s—two cases that appalled the Enlightenment cognoscenti and seemed to personify religious delusion and group hysteria.

Rather, complained Petetin, it was the scientific community itself that had become hysterical, denouncing catalepsy, much as they denounced somnambulism, before they'd given it a proper hearing. For this reason, no doubt, Petetin's later supporters, including those who edited his posthumous publications, insisted upon his personal rectitude and moral character, extolling Petetin's scientific mind and demeanor. These objective claims notwithstanding, Petetin emphasized elements of clairvoyance and telepathy in his writings, thereby connecting his work with the spiritualism and alternative medicines that circulated in Lyon in the 1780s.

More to the point, Petetin contributed to shaping the morbid undercurrents that characterize postrevolutionary medical discourse. When recounting his case studies, Petetin used literary touches, incorporating dialogues and testimonies that were fictitious in nature—a tendency that had appeared in many other medical writings of the time: Plane's physiognomy, Moreau de la Sarthe's natural history of women, Robert's and Millot's sex manuals, and, as will be seen in the final chapter, a literary genre called "physiological writing." This is the intellectual world in which Petetin's work is best situated, and it was these formal elements of his work that made it persuasive within some medical and lay intellectual circles.

In 1807, just when Petetin began attracting posthumous interest, Puységur returned to somnambulism and animal magnetism and observers were quick to associate the two men.[56] After the Reign of Terror, when Puységur and his family were released from prison, he returned to his old estates in Buzancy and turned to political life. Between 1800 and 1805, he served as mayor of Soissons, joining the crowd of Brumairian elites who administered the Napoleonic Empire, but soon after he left government service, mesmerism beckoned him once again. As it turns out, he had just discovered another somnambulist, this time a young boy named Alexandre Hébert, and now events propelled Puységur upon the Parisian medical stage, garnering him the celebrity that had eluded him in the 1780s.

In orchestrating his comeback, Puységur first published a new book, titled *Du Magnétisme animal*, in which he summarized his discoveries to date and tried to situate them in the new medico-scientific teachings of the Paris hospitals. He also included his correspondence with over a dozen thinkers, including Tardy de Montravel and Johann Kasper Lavater, as well as the minutes from meetings of the Harmonic Society in Strasbourg. In all this, Puységur insisted that he had discovered something new in his dealings with somnambulists and he refused to believe that observers remained indifferent or hostile to his insights. Nonetheless, he insisted that his persistence in the

face of calumny and hostility alone proved his good faith. Though the scientific establishment persecuted mesmerists with the same zeal as a Jacobin militant, he stood by what he had seen and what he had known. Magnetism, he said, "*exists because it exists* [*sic*]; for twenty years I haven't had to learn more about it."[57]

That said, Puységur believed that recent scientific and philosophical interests betokened greater acceptance of somnambulist theories. Scientific disapprobation, revolution, and war notwithstanding, a handful of mesmerists had kept the magnetic flame burning. From the Italian-speaking lands, Luigi Galvani and Alessandro Volta had stimulated interest in electricity and electrical experimentation, and some of these experiences, it was said, confirmed earlier theories of the animal spirits and nervous impulse.[58] In Paris, as Puységur pointed out, pedagogues and researches such as Roch-Ambroise Cucurron Sicard and Valentin Haüy had taught the deaf and blind not just language but entire concepts independent of sensory experience, notably sound and light, all of which suggested that the senses worked in ways that were not straightforward at all.[59] Elsewhere, mesmerism had not just survived, but thrived, above all in Berlin, where prominent doctors and medical faculty embraced mesmerist doctrines and preached it in their books, in public séances, and in classrooms. By connecting animal magnetism with cutting-edge scientific research, Puységur hoped to distance his work from spiritualist or occultist trends in late Enlightenment society, above all those associated with Cagliostro, Swedenborgianism, and Martinism—all which had infused Petetin's work on catalepsy.

Most importantly, Puységur insisted that somnambulism illuminated two of the greatest discoveries of the early 1800s: namely, a new appreciation for the power of the human will and something that observers were calling *expérience intérieure.*[60] These ideas had attracted some of the keenest minds of postrevolutionary France, ranging from the poet Joseph Joubert to the writer Xavier de Maistre (brother of the reactionary political thinker Joseph de Maistre) and the philosopher François-Pierre Maine de Biran;[61] they also influenced the new school of Eclectic philosophy that dominated French education throughout the nineteenth century.[62] Rejecting Lockean psychology and sensationalist empiricism, these intellectuals hoped to discover the true self that lurked within. Here, the attentive observer encountered a deeper world of the will, instinct, intuition, and imagination, one that seemed to hover on the fringes of consciousness, but was still accessible to anyone who sought it diligently. These intellectuals said that inner experiences demonstrated that innate powers of the mind—coming from inside the self—could create and dominate reality itself: in these cases, the "moral" ruled the "physical," just as the new mesmerists were claiming in the early 1800s. Accordingly, these thinkers emphasized a version of the self that was, to follow Jerrold Siegel's terminology, more reflective and auto-generative, and less deterministic or relational to society.[63]

Puységur underscored this point about human willpower. According to him, the human self contained "an agent … under the force and activity of its own will."[64] Rather than seeing magnetism as a fluid dispersed throughout the cosmos (as had Franz Anton Mesmer), Puységur localized this force within the individual body.[65] Consequently, people could control animal magnetism alone by the power of the will—and this power inhered within their minds. In Puységur's words: "It is only in the magnetic act that I can

perceive [this force]: in man, *that cause is his thought*" [*sic*].[66] Through this means, the attentive magnetizer could open up fantastic insights into mind and body; not just for controlling health and pathology, but also for discovering the essence of the human condition.

Herein, for Puységur, lay the great importance of somnambulism. In this state of sensory absorption, the person seemed unconscious to the outer world. But this perception was false. In reality, somnambulism constituted a deeper state of inner awareness, one in which the person could go inside and find their deeper instincts and intuition and thus diagnose their condition. Puységur emphasized this heightened self-awareness in no uncertain terms. In somnambulism, he said, the person experienced a "recognition of their intuitive faculties," a recognition which constituted, in some ways, a form of "clairvoyance."[67]

Puységur thus insisted that the magnetizer was neither quack nor faith healer. He possessed no special powers or remedies which he alone could provide—the surest mark, he said, of any charlatan. Rather, said Puységur, magnetic skills were as universal as the magnetic fluid that animated the human body. Anyone could have a magnetic experience, and anyone could learn how to use it. Medical professionals or priestly elites need not monopolize its powers. It was open to everyone. Magnetism was "neither a science nor an art, but rather a faculty"—and "[a]ll men have the faculty of magnetizing."[68] It was a democratic medicine for a democratic time, a time when individuals could accomplish anything they wished by hard work and merit.

To access this deeper self, the *moi*—as it was theorized by philosophers such as Maine de Biran and the Eclectic school of Victor Cousin—patients only needed to concentrate the magnetic fluids within their bodies and deepen their sensibility. From here they could turn inwards and direct their will and mental forces: "your concentrated attention must activate the energy of your willpower." It was a power, Puységur insisted, that was "invisible, active, and sovereign."[69]

In all this, the magnetizer and the magnetized could, quite literally, shape individual and natural reality and make both conform to one's will and one's inner vision. Whether this power was innate, possessed by all living beings as a primordial instinct, or whether it was acquired, somehow learned in the human world of education and experience, Puységur knew not. But one thing Puységur thought he did know: animal magnetism could help people overcome personal suffering and let them transcend sickness and pain. As he wrote, "I agree, it's not terribly hard to explain—*it is because it is: thought moves matter*" [*sic*].[70]

Puységur summed up his entire philosophy of magnetism, offering it as a creed for his followers:

> My willpower, Messieurs, the motor of all my acts and my resolutions, is equally that of my magnetic action.
>
> I believe in the existence, in myself, of a power.
>
> From this belief is to derive my will to exercise it.
>
> And the act of my willpower determines all the effects that you have seen me produce and which you cannot put in doubt.[71]

He then exhorted his readers:

> The entire doctrine of animal magnetism is contained in the words believe and want, which I've written at the beginning of my first memoirs. I *believe* that I have the power to activate the vital principle in my kindred; I *want* to make use of it; herein is contained my entire science and method. *Believe* and *want*, Messieurs, and you will do as much as I have done.[72]

In 1812, Puységur condensed all these themes in his short book titled *Les Fous, les insensés, les maniaques et les frénétiques ne seraient-ils que des somnambules désordonnés?* Not surprisingly, he responded to this question in the affirmative, claiming that animal magnetism could cure the mentally ill. The book was the case history of a young boy named Alexandre-Martin-Stanislas Hébert and Puységur's travels with him in Paris, where he met with the leading medical authorities of the day, notably the phrenologists/neurologists Franz Gall and his associate Johann Gaspar Spurzheim, as well as Philippe Pinel, the pioneer of modern psychiatry. As in his other writings, Puységur filled this book with dramatic narratives, impressionistic dialogues, and inserted documents and testimonials. *Les Fous, les insensés, les maniaques et les frénétiques* was, in its essence, a digressive, collage-like text that mirrored so many of the other medical books of the times that publishers directed toward the broader reading public.

Alexandre-Martin-Stanislas Hébert was a twelve-year-old boy who had been "attacked by vertigo and over-excitation" and who presented interesting "facts about somnambulism."[73] His father, a clockmaker, attested to his medical history. At age four, Alexandre underwent surgery—trepanation—for an abscess on his head. The procedure at first seemed a success, though the boy still complained of headaches. Sometime during his eleventh year, Alexandre suffered from a nervous attack and experienced severe physical pain. He recovered, but not fully, because nine months later he fell unto "almost habitual somnambulism." Despairing over the boy's health—as well as his capacity to learn a trade—Alexandre's father entrusted him, first to the cathedral master at Soissons, and then later to the parish priest at Buzancy, where he could not fail to escape Puységur's notice, especially after the boy started manifesting psychological attacks during the liturgical offices.

In June 1812, Puységur examined the boy for the first time. Alexandre, he reported, demonstrated a regular pattern of mental fits, in which he suffered from headaches and then fell into convulsions. He hit his head violently, and, if people tried to restrain him, he became frantic and beat his skull against the floor and walls. Once restrained, he tried to bite his caregivers, and he wept bitterly. However, once he recovered from his state, he remembered nothing.

As with Petetin's cases of catalepsy, Alexandre could predict the timing and duration of his attacks, something that impressed Puységur, as well. Puységur started his sessions by raising his hands over Alexandre and speaking softly to him. The boy entered a "the calmest magnetic sleep possible" in which he informed him, among other things, about the possible causes of his disturbances. These magnetic sessions continued through June and July. During this time, Alexandre sleepwalked regularly, and Puységur took care

never to disturb this activity. In these states, Alexandre sometimes engaged in convivial behavior, interacting with other children and even looking at the illustrative plates in Diderot's and d'Alembert's *Encyclopédie*. In other instances, his somnambulism became wild and dangerous, as when he tried to walk out of an upstairs window.

Given these circumstances, on August 13, Puységur assumed full responsibility for Alexandre. He took him into his house, even sharing the same bedroom. Puységur wanted that nothing in Alexandre's life remain outside his purview. He wrote, "I resolved myself to break this new relation and to dominate his senses and his imagination."[74]

The next week, Puységur traveled to Paris to show Alexandre to the top physicians. He first visited Gall and Spurzheim—the most prominent specialists on the brain and the nervous system—surprising them at home and demanding an audience. Puységur's attraction is understandable: Gall and Spurzheim had ignited the medical, scientific, and literary community with their phrenological theories of brain localization and intellectual function, and phrenology rapidly became one of the more controversial ideas in Napoleonic France. Gall's and Spurzheim's detractors denounced their work as unbridled materialism and atheism—"fatalism" and "determinism" were the preferred words—and these critics characterized phrenology as another dubious pseudoscientific fad, one on par with mesmerism. Strikingly, in his public lectures in Paris, Gall illustrated many of his theories about brain function by using examples about extreme psychosomatic states, such as visions, catalepsy, "traditional" somnambulism, dream-like states, epilepsy, and other mental or neurological illness; and many auditors made explicit connections between his work and Lavater's physiognomic theories.[75]

The meeting, as Puységur recounted it in his book, was uncongenial. Puységur used the opportunity to proselytize about animal magnetism, insisting that everyone possessed an inner physical agent that made them susceptible to magnetic sleep. Though neither Gall nor Spurzheim could diagnose the boy's condition, they berated Puységur for his unfounded theories, dismissing them as Swedenborgian mysticism. Rankled, Puységur retorted that animal magnetism undermined Gall and Spurzheim's radical materialism, and he compared somnambulism to Gall's well-known experiences of mental trances and dream-like states, something that often emerged in debates over phrenology and brain function localization.[76] Gall became so irate that he left the room, but Spurzheim remained, fascinated by the boy, whom he continued to examine.

Having alienated Gall and Spurzheim, Puységur then marched Alexandre off, first to the Jardin des Plantes, and then to the Salpêtrière hospital, now looking for the psychiatrist Philippe Pinel. Eventually, on August 25, Pinel met with Puységur and examined the boy. In Pinel's view, Alexandre may have suffered brain damage on account of his surgery, and these lesions caused the boy's unusual behavior. No doubt hoping to placate Puységur, Pinel allegedly invited him back in the academic year and offered that he could experiment with the mental inmates in the Paris asylums. Whatever the case, Puységur seemed satisfied by the encounter, and at this point, he ended his narrative. Pinel, for his part, never mentioned Puységur in his published writings on somnambulism.[77]

How should one make sense of Puységur? Both his contemporaries and subsequent historians have portrayed him in different ways. In his own time, one cautious reviewer in

the *Gazette de Santé* pointed to his aristocratic pedigree, his valiant war record, and his stellar history of public service—and then asked the audience to read Puységur's books and judge for themselves.[78] Scribbled marginalia in one of Puységur's texts contained at the library of the Paris Faculté de Médecine show just how exasperated learned physicians could become. "That's false," scrawled one anonymous critic when Puységur described Alexandre's somnambulist states. "You always arrive just after an epileptic attack." "Read about epilepsy in my scientific study you will see that your conclusion is but stupidity."[79] By contrast, one medical student, Victor-Arsène Choquet, considered magnetic somnambulism to be an actual experience, but one that was self-induced. He cited a personal incidence of somnambulism from when he was an army surgeon stationed in Warsaw. A gastroenteritic outbreak swept the military hospital and took out all the staff, and he found himself working day and night. As a prophylactic measure, he started drinking twelve cups of coffee each day, and soon he fell into a hysterical state from which he lapsed into magnetic somnambulism. It got better, he said, when he accepted medical advice, got some rest, and stopped drinking so much coffee.[80]

It is difficult to determine whether Puységur was an outright quack, a charismatic leader of a sectarian group, or a well-meaning but misguided philanthropist, looking to substantiate a frustrated sense of noblesse oblige. Both Henri Ellenberger and Bertrand Méheust, in their monumental works on the unconscious, identified him as a brave pioneer in the study of the mind.[81] Nonetheless, such a reading distorts what was exploitative and sensational in Puységur's activities, especially in his dealings with Alexandre. Perhaps it is safest to say that Puységur stumbled upon a bizarre psychosomatic phenomenon—somnambulist or hypnotic states—and he did the best he could to understand them; nonetheless, he sometimes exploited his patients in inappropriate ways and relied upon dubious magnetic theories to explain the unusual symptoms he observed.

Whatever his real motivations, Puységur succeeded in resurrecting the discredited mesmerist cause, and he divided both scientific and literary communities. Unlike Mesmer, however, Puységur found serious supporters within the medico-scientific establishment, and not just figures from the professional margins. Together, in the 1820s, they opened a new public debate on somnambulism and animal magnetism.

Puységur sent shock waves through the intellectual community, like an anarchist bomb tossed at a royal carriage. Here, the mesmerist controversy entered its final and most provocative phase. In autumn 1812, articles on Puységur began appearing in the *Journal de Paris* and the *Journal de l'Empire*, though this initial debate ended when the Napoleonic regime collapsed. Once Louis XVIII was seated more securely on his throne, mesmerist polemics erupted once again, notably in an irreverent exchange within the pages of the *Journal des débats politiques et littéraires*.[82] A new mesmerist group had formed—the Société du Magnétisme Animale à Paris—picking up the old work of the Strasbourg Harmonic Society (to which Puységur had belonged)—and then several pro-mesmerist periodicals appeared: *Annales du Magnétisme Animal* (1814–1816), *Bibliothèque du Magnétisme Animal* (1817–1819), *Journal de la Société du Magnétisme Animal* (1818), and *Archives du Magnétisme Animal* (1820–1823). All these texts repeated alleged cases of

somnambulism and magnetic cures, and the correspondents engaged in polemics with their anti-mesmerist detractors, drumming up support for their outspoken partisans. The whole debate of the 1770s and 1780s seemed to have appeared once again.

Critics registered shock and outrage. They marveled at how mesmerist ideas—which they thought doctors and scientists had wiped out—could return, almost zombie-like, to haunt the postrevolutionary scene. One critic wrote (and not without histrionics):

> O heavens! What would the Academy of Sciences say, who condemned animal magnetism thirty-two years ago? What will say all the chemists, the anatomists, the physiologists, the pathologists, the naturalists, the anthropologists, the ichthyologists, the tetrapodologists, the ornithologists, the entomologists, when they hear that the magnetic snake, whose head they thought they had smashed in, has arrogantly reared itself once again by wrapping itself around LITUUS and becomes the sacred serpent of Esculape, the symbol of life and health?[83]

Truly, said the anonymous critic, rational observers should dismiss the new rage for animal magnetism as sheer insanity. With acid wit, he wrote, "Those who profess faith in their predictions should be referred to Dr. Pinel; his *Traité de l'aliénation mentale* indicates the kind of medicine that's really best for them."[84]

In his study of hypnosis in the nineteenth and twentieth centuries, Bertrand Méheust identified four specific currents in the new mesmerist craze: first, a group of mesmerists, exemplified by Petetin and his followers, who remained materialistic and naturalistic in their outlook; a second group of so-called "psycho-fluidists" who combined spiritualist and materialist ideas and insisted that animal magnetism helped illuminate the inner workings of the soul and the will; a third group of "spiritualists," associated with the Theosophists and Martinists in Lyon, who interested themselves in miracles and divine experiences; and lastly, a group of "imaginationists," who focused upon the will and the liberation of the inner mind. Of this last group, the most famous person was a curious figure named Jose Custodio, the Abbé Faria, who espoused ideas about "lucid sleep." Faria made such an impression that he was caricatured by Honoré Daumier (fig. 7.1) and made a cameo in Alexandre Dumas's *Le Comte de Monte Cristo* (1844).[85]

While Méheust identified the main strains of mesmerist thinking in the early 1800s, his analysis obscures an important contention among this new movement: how partisans divided between those who interested themselves in spiritualist and occult issues and those who situated themselves in an empirical and observational tradition, which, they alleged, had been established by Puységur.[86] As Mesmer had done thirty years before, these partisans clothed themselves in the mantle of scientific rationality and empirical observation. Several prominent doctors, working from within the Parisian medical establishment, identified with this latter group of mesmerists. Through this partnership, the new mesmerists forced leading physicians and academicians to reopen the case on somnambulism and animal magnetism, ushering in a new set of official investigations and public demonstrations on the matter. Now, however, the process was clouded with greater ambiguities, as several young physicians stood up to defend the mesmerist cause.

At this stage, three figures dominated the mesmerist resurgence: Joseph Deleuze

(1753–1835), Jean Du Potet de Sennevoy (1796–1881), and the Baron Étienne-Félix Hénin de Cuvillers (1755–1841). Although they sometimes disagreed with one another on doctrinal points—Hénin de Cuvillers, for instance, dismissed Deleuze's faith in magnetic fluids—they all identified with Puységur and shared common ground. Of this group, none had received formal medical training (though Deleuze had extensive experience as a naturalist); Deleuze and Hénin de Cuvillers came from the prerevolutionary generation and followed the mesmerist controversies of the 1770s and 1780s; and Hénin de Cuvillers and Du Potet had, like Puységur, harkened from aristocratic backgrounds and Hénin had also served in the army.

Deleuze remained the most important and respected figure. Trained as a naturalist, he worked as the librarian at the Muséum National de l'Histoire Naturelle, much as J.-L. Moreau de la Sarthe, that consummate naturalist-physician, served as chief librarian for the Paris medical school. Deleuze wrote a well-received book on the museum's collections, which also appeared in English, and he even translated Erasmus Darwin's scandalous poems on plant sexuality in 1799. He delivered eulogies on notable members of the scientific and medical establishment, including the famed naturalist and explorer François Péron (which he published in 1811). In Paris, he worked with the botanist Antoine-Laurent de Jussieu, who became director of the Muséum National in 1794 and who had earlier refused to endorse official academic documents protesting Franz Anton Mesmer's work in the 1780s.

Aussitôt le pas ferme et les sens allumés
Faria tend les mains, le regarde : *Dormez.*

Avec plus de lenteur la lumière s'est faite;
Phryné disputait mieux sa facile défaite;
Comme le son fêlé d'un faux Philippe d'or
Potier bâille, rebâille et puis il bâille encor,
Pousse un long ronflement, et, prudente momie,
Il s'allonge et s'endort comme à l'Académie.

FIG. 7.1. Honoré Daumier, "Le Magnétisme animal," in *Némésis médicale illustrée: recueil de satires, par François Fabre, phocéen et docteur; préface par Théodore Poupin, vignettes par Honoré Daumier*, 2 vols. (Paris: Au bureau de la "Némésis médicale," 1840). No. 01883. Bibliothèque Interuniversitaire de Santé, Paris. Daumier's caricature capture Abbé Faria, one of the more extravagant of Puységur's followers in the early nineteenth century. Faria here extends his hands and commands his patient into a magnetic sleep.

By contrast, Du Potet de Sennevoy lacked Deleuze's scientific credentials, but he did possess aristocratic pedigree, a fact that helped Puységur and carried weight in postrevolutionary life. In Paris, he participated in public experiences on magnetism at the Hôtel-Dieu in 1820 and 1826 and taught public courses on animal magnetism at the Athénée Centrale. Over the years, he launched two pro-mesmerist journals: *Propagateur du Magnétisme Animal* in 1827 and the *Journal du Magnétisme* in 1845.

Like Du Potet, Hénin de Cuvillers came from a privileged background. A former army marshal and baron of the empire, he became a member of the Société Royale Académique des Sciences in Paris and assumed duties as the secretary for the new Société du Magnétisme Animal in Paris. In 1814, he launched a journal called the *Annales du Magnétisme Animal*, which continued, under various names and formats, until 1823. While he rejected older ideas of a universal magnetic fluid—so redolent of Mesmer's practice—he insisted that matter and spirit interacted with one another and that both shaped natural reality.[87]

It was Deleuze, however, who spread the new mesmerism in the intellectual community. From the beginning of his crusade, Deleuze identified himself as a disciple, not of Mesmer but rather of the Marquis de Puységur, whom he described as "one of the most charitable and truthful men who has ever existed."[88] Like Puységur, Deleuze insisted on the scientific validity of somnambulism and animal magnetism, though, like many Restoration philosophies, his work evinced a spiritualist dimension.

In Deleuze's view, observers could understand the mind–body problem in three ways. Matter, he said, could act upon matter through the force of attraction (as with gravity); the spirit could act upon spirit in the form of the will; or, lastly, spirit and matter could act upon one another reciprocally. In this vein, he reported that "Magnetism is the influence of the spiritual being upon another spiritual being, and through it, upon organized material."[89]

Nonetheless, Deleuze cautioned that no occult or immaterial force determined animal magnetism; rather, it was rooted in natural reality and simply allowed one to access one's primordial impulses—a deeper, more intimate manner of knowing body and self. "Somnambulists are in a state equally different from waking and sleep," he said. "In this state, their interior faculties assume greater energy as their external organs cease acting; a new sense develops within them, or rather, an instinctual faculty which does not reveal itself in one's regular condition."[90]

Here, magnetism illuminated one of the great discoveries of the early nineteenth century: the power of the human will. Everything followed from this central discovery, which Deleuze attributed to the original mesmerist movement, its excesses notwithstanding.[91] But it was Puységur who had truly demonstrated how the magnetizer could induce magnetic states by the force of will. At times, it sufficed simply to use "magnetic touch," a laying-on of hands, which brought the patient into a calm and peaceful state, one that tuned out all distractions and allowed them to explore the inner world of their minds and bodies.[92]

Deleuze described how absorption and the magnetic touch went together. Foremost, the magnetizer must believe that it was possible to magnetize the patient. The magnetic seance became a unique and intimate experience that evolved between the healer and the

patient. "I touch a sick person or I extend my hands over him, with the desire to do good, and I succeed." He continued to describe magnetism as a projection of himself: "I direct upon him, by my willpower, an emanation of myself. This emanation penetrates him; it helps him; it supports the efforts that nature makes to heal him by itself; it produces or facilitates diverse crises."[93]

Deleuze thus rejected the carnival-like elements associated with Mesmer in the Old Regime. Following Puységur, Deleuze stressed that the "new" animal magnetism lacked the dramatic, convulsive states, bordering upon orgiastic display, which characterized the "old" one. Rather, he emphasized the self-possessed, collected approach of the magnetizer, as well as the peaceful, meditative, and calm state of the magnetized patient. Critics, he stressed, encountered neither histrionic display nor impropriety with the new magnetism. In his words: "The experience and self-control [*sang froid*] of the part of the mesmerist, and the confidence and good faith on the part of the mesmerized, make any drawbacks superfluous, while the advantages are enormous."[94]

Deleuze defended animal magnetism by insisting that it served pragmatic therapeutic purposes. This is an important point, one that explains why his ideas appealed to medical audiences. Quite simply, he said, magnetism could alleviate a patient's suffering, and he failed to understand why any humane observer would object to that. Deleuze's plea was essential, for he shifted the debate from *curing* disease to *managing* acute and chronic pain. Mesmerism, when applied correctly and ethically, was harmless and thus the government should not regulate it like other substances or therapeutic techniques, such as opiates, emetics, or shock therapies. That said, Deleuze warned that mesmerism should not constitute the first choice in a doctor's therapeutic arsenal. Rather, it remained the last resort, an objective risk, once he had exhausted his others means of controlling pain and suffering.[95] As Deleuze pointed out—and he was probably correct in this claim—patients overwhelmingly preferred mesmerist treatments over Broussais's extensive phlebotomies or Leroy's violent purges, and he criticized how few patients survived these painful therapies. Animal magnetism, he said, could provide a better way.[96]

Most importantly, Deleuze insisted that the new mesmerism upheld moral propriety. As seen previously, critics long alleged that mesmerism created undue familiarity between healers and patients, above all with women, while others worried that magnetism inflamed the imagination and thus ignited immoral thoughts and behavior. Deleuze dismissed both charges, once again emphasizing that magnetism facilitated a calm and introspective state of being, one devoid of convulsive or erotic elements. He went so far as to say that critics should not fear magnetic effects upon women because the somnambulistic condition was reciprocal, a two-way street of communicative behavior. Women, he said, could magnetize men as readily as men could magnetize women, as it was equally in their powers and capacities of mind. He wrote: "We have not repeated enough that magnetism is a faculty that belongs to every individual, irrespective of sex; it owes its power to the desire to do good."[97]

With these words, Deleuze presented the new mesmerism as a moral and egalitarian force, one that facilitated social and sentimental bonds. By encouraging reflective dialogue, animal magnetism advanced individual well-being and social harmony.

Everyone, he said, should share these hopes in Restoration France. He wrote:

> Magnetic practice inclines everyone to honest sentiments; it elevates the soul and it sweetens morals and manners; it brings men together through the bonds of friendship, rendering services and thanksgiving; it makes people disgusted with frivolous amusements; it overturns political discussions; it inspires a taste for orderliness and peace. The first principle of magnetism is an active charity; he who doesn't have the seed of this virtue will never be able to magnetize; he who is given it will feel charity develop more and more in himself as he exercises it.[98]

Deleuze failed to impress all physicians and surgeons. In 1812, as the new controversy gained steam, one doctor harnessed all the old arguments against mesmerism: A.-F. Jenin de Montègre (1779–1818). Montègre expressed anger that people whom he thought should know better were now saying—in public—that perhaps it was time to "revisit" the mesmerist controversy, as if it had ever been in doubt. Indignant, Montègre reminded his audience that mesmerism had been subjected to one of the most extensive scientific inquiries in modern time and that some of the best-enlightened minds had studied the subject, ranging from Antoine Lavoisier to J.-A. Bailly and Benjamin Franklin. Animal magnetism, he insisted, lacked any credible support and no new evidence had emerged to change the verdict. "Magnetism is only an old error," he stressed, not recognizing how Puységur appealed to new ideas about the self and will.[99]

The new mesmerism found its most vociferous critic in the persona of J.-J. Virey, who has appeared in multiple scenes in our story of medical writings and subcultures. In 1818, Virey dismissed the new mesmerism in a book-length piece he published in the authoritative *Dictionnaire des sciences médicales*, a venue for which he wrote multiple articles. It is unsurprising that mesmerism attracted a physician-writer like Virey. As a consummate popularizer, he followed all medical fads and innovations, looking to exploit any angle that would enhance his literary and scientific status. One suspects that he used mesmerism to present himself as defending scientific honor against charlatans and faith healers, brandishing professional integrity to deflect his own ambiguous status in the medical establishment. For his part, Virey attested that he had known several prominent mesmerists and studied animal magnetism with them, even meeting Franz Anton Mesmer before the old man's death in 1815. Given this firsthand experience, Virey swore, nothing could convince him that mesmerism held scientific credibility, and he dismissed its adherents as suffering from an overheated imagination.

Like Montègre, Virey was astonished that serious doctors and intellectual were again debating mesmerism. He asked why the scientific community failed to exorcise this Old Regime demon, which seemed to return, time and again, to possess the bodies it once inhabited. Still, he noted that the new mesmerism drew upon on several recent trends. Foremost, it borrowed legitimacy from serious branches of medico-scientific inquiry, notably the spectacular discoveries made by savants regarding electricity and magnetism and the therapeutic breakthroughs they augured. Unfortunately, he said, mesmerists exploited the hopes and beliefs of people who understood little about these fields, confounding their poor grasp of experimental methods. Mesmerism thus demonstrated

"the eternal ignorance that weighs upon the great majority of our species."[100]

There was, in addition, a gendered dimension to mesmerist beliefs and therapeutics, a point to which Virey returned. Animal magnetism confirmed all of his negative assessments about women and how women could contaminate and corrupt society through their behavior, weakening moral integrity and thus begetting decadence and degeneration. As he saw it, those who engaged in mesmerist practices, and believed in its efficacy, were weak and effeminate. Mesmerist followers, he averred, comprised a long list of degenerate types, notably women, "delicate and nervous" personalities, impressionable young people, and a sexually debased cross-section of high society—including *les élégantes* and *hommes de luxe* who were serviced by "young men who were handsome and well-built like Hercules."[101] For him, mesmerism remained a bubbling cauldron of erotic poison, much like masturbation, and one to which women were especially vulnerable. Recently, he fumed, the mesmerist vogue had spread among military men, who were now languishing under the Restoration government, bored and lazy in their purposeless posts, and who had nothing better to do than to bully around common soldiers and to inflict upon them their misguided enthusiasms.

To these sexual anxieties, Virey added a new factor: a frank xenophobia, whereby he attributed mesmerism to an invasion of speculative German philosophy. As both he and Montègre had argued, many dubious intellectual enthusiasms had originated from east of the Rhine, and Virey decried the vogue for German ideas in Paris high society, such as those championed by Germaine de Staël and her cohorts. Virey contrasted the German philosophic style negatively to the French tradition of positivism and empirical skepticism, both of which he believed anchored scientific practice to natural reality. It was this kind of sloppy thinking, he said, that spread dubious intellectual fads and pseudoscientific theories among Paris high society.[102]

Throughout this jeremiad, Virey pictured scientific authorities in an epic battle against superstition and quackery. And so Virey must have been astonished when a group of young physicians—all of whom had been schooled in the skeptical empiricism and philosophical materialism taught in the Paris clinics—announced that they supported the new mesmerism as both a theoretical and practical approach to medical treatment. The new mesmerism, whatever its alleged merits, drew strength from the ambiguous status of medical knowledge in postrevolutionary France: its porous disciplinary boundaries, the uncertain and provisional nature of medical treatments, and the greater interest in spiritualist and religious values found in among intellectuals and high society.

Prominent intellectuals now discussed Puységur's and Deleuze's works seriously. One example appears with the philosopher François-Pierre Maine de Biran. Maine de Biran was an associate of the prominent Idéologue group and friend of Pierre Cabanis and Destutt de Tracy, despite his religious and royalist sympathies; following the Napoleonic period, he inspired the burgeoning school of Eclectic philosophy, especially its flamboyant leader, Victor Cousin. Maine de Biran had criticized the sensationalist philosophy associated with the Abbé de Condillac and C.-A. Helvétius, and he tried to formulate a philosophy of the independent Ego, one that acted independently of the environment and innate determinants. For his erstwhile followers, Maine de Biran

appeared to be the French incarnation of the great philosopher from Königsberg, Immanuel Kant himself.[103]

Not surprisingly, the new mesmerism appealed to Maine de Biran because he was interested in human will and self-autonomy. In his philosophic notebooks and journals, he often referenced somnambulism—he studied Deleuze's works with great care—and wrote several short pieces on the subject, presenting some of his ideas to the medical society in his native Bergerac, which he himself had established in 1806. He was intrigued by how mesmerism could suspend normal brain and nervous activity, as when a person slept, and then concentrate sensibility to such a degree that it opened "la vie intérieure." From here, he hoped, the individual could access the inner realm of the self, providing new insights and intuition.[104]

Nonetheless, Maine de Biran doubted many mesmerist claims, dismissing their theories as "insufficient." It was true, he reasoned, that mesmerism allowed people to reclaim "preserved impressions" locked deep within the mind. In the somnambulist state, people saw themselves as something new—gazing upon their minds like some terra incognita—with no prior suppositions or memory of themselves. For this reason, they saw their minds and bodies with such sudden insight. Yet once they awoke from the magnetic trance, they lost this self-awareness and were forced to rely upon the magnetizer to help them remember their inner journeys. For Maine de Biran, somnambulism offered fascinating glimpses into the person's inner life—and how it could transcend the more base elements of organic and animal physiology—but he insisted there was nothing marvelous about it.[105]

With his curious but skeptical attitude, Maine de Biran anticipated the young doctors who picked up the mesmerist causes in the 1820s. Likely, a series of public demonstrations at the Hôtel-Dieu de Paris inspired them. These events took place in October 1820 and involved several leading figures in the mesmerist crusade, including Jean Du Potet de Sennevoy, as well as prominent physicians such as Pierre Husson, the latter who would play an important role in adjudicating the controversy. The Hôtel-Dieu experiences divided spectators, who were unsure of what they witnessed, and it sparked significant debate within the medical community, especially among those doctors who were intrigued by the therapeutic possibilities.

Among these medical apostates, six figures stand out: Auguste Roullier (n.d.), A.-J.-F. Bertrand (1795–1831), Léon Rostan (1796–1866), Pierre Foissac (1801–1886), Étienne-Jean Georget (n.d.), and J.-Amédée Dupau (n.d.). Often, these doctors shared a mutual interest in nervous pathology and vitalist physiology, as seen with the Montpellier tradition of anthropological medicine; moreover, many of them were inspired by the spiritualist philosophies that characterized mainstream intellectual life under the Restoration.

To give one typical example: Auguste Roullier first earned his medical degree from the Montpellier school, and he connected somnambulism to vitalist physiology as well as new ideas about inner experience. According to him, somnambulism illuminated a cluster of nervous conditions, including meditations, visions, ecstasies, catalepsy, second sight, convulsions, weakness or malaise [*défaillance*], asphyxia, apparent death, and other inner experiences. In all these cases, he insisted, "there's a kind of isolation, a concentration of forces on the interior, and the greatest development of intellectual

faculties."[106]

Other physicians echoed Roullier. Étienne-Jean Georget, for instance, wrote on psychiatry and deviance, but later he renounced the materialist philosophy he learned in the Paris clinics. In his massive study on nervous pathology, he discussed animal magnetism at length and claimed that he was converted to the doctrine after having observed firsthand cases of somnambulism.[107] His younger colleague, Alexandre Bertrand, recounted a similar experience. Bertrand had already written a short book on celestial physics—geared toward a lay audience—and he then turned to the mesmerist controversy, writing two lengthy volumes on the subject. In his opinion, somnambulism involved "over-excitation of the brain": here, patients experienced a "perfection of intellectual faculties, active imagination, development of memory"—and then, following their magnetic stupor, a total "forgetfulness upon awakening."[108] Like Roullier, as well as his friend Maine de Biran, Bertrand sought to harmonize religious and scientific precepts, and he saw cases such as mesmerism and catalepsy as an entryway to a deeper understanding of the material world.[109]

Of these physicians, Léon Rostan explained his apostasy most fully in an article published in the *Dictionnaire de Médecine* in 1825. Like Georget, he long interested himself in nervous pathology. A graduate of the Paris medical faculty and member of the newly formed Académie Royale de Médecine, Rostan wrote an early thesis on charlatanism and then penned several books explaining the new Paris medicine and clinical instruction. He espoused a holist understanding of human physiology—he also studied health and hygiene[110]—and he promoted a more patient-centered approach to healing, demurring more flamboyant or heroic regimens, which he believed were cruel and ineffective.[111] These factors drew him to Puységur and Deleuze.

In his writings, Rostan insisted on the power of the *moral*—the mind or soul—over the *physical*—the body and its material organization. As he saw it, magnetism was simply heightened nervous experience, one in which the mind dominated material qualities, shaping self-perceptions and mind–body experiences. In this state, one person could, by the force of will, dominate the mind and body of another person: hence the strange quality of second sight or alleged clairvoyance that went with somnambulist states. He thus classified animal magnetism alongside a range of nervous phenomena including hysteria.

According to Rostan, any self-respecting doctor who embraced animal magnetism risked ridicule and professional censure. Since somnambulism remained a singular, even extraordinary state, he exhorted his colleagues to relinquish professional posturing and to study mesmerism in a dispassionate scientific manner. He had once disparaged mesmerists, dismissing them as quacks and fools, yet the public experiences at the Hôtel-Dieu had raised his curiosity. It was only under exceptional circumstances, when one of his patients seemed beyond any therapeutic help, that he took a desperate gamble and tried to mesmerize his patient. The results, he claimed, astonished him.[112]

This experience challenged everything that he, Rostan, had ever learned in his clinical training. Shaken to his core—he described his response as a near-conversion event—he repeated Deleuze's methods upon several other patients and found they responded similarly. He defended his actions, not by using scientific evidence but rather by asking

his medical readers to accept his good faith and by appealing to their charitable spirit. He claimed that everyone must be wary of two things: excessive credulity *and* excessive skepticism. The reasoned observer, he insisted, must always maintain a doubtful attitude, but that did not mean you had to persist in your doubt after you've experienced something extraordinary for yourself.

To make his case, Rostan appealed to two authorities, both whom had expressed openness to the mesmerist cause: the comparative anatomist Georges Cuvier and the mathematician and physicist Pierre-Simon Laplace. Cuvier, for instance, had described how individuals could sometimes experience sympathetic nervous states, almost as though it were possible to feel things at a distance, much like gravity acted across space.[113] Similarly, Laplace discussed the odd powers of magnetism and confessed that these bizarre nervous conditions seemed to elude scientific understanding.[114] Throughout, Rostan praised Deleuze and Petetin, and he emphasized the conversion of his friend and colleague Georget to the mesmerist cause.

Nonetheless, Rostan cautioned against attributing any divinatory elements to animal magnetism, elements that he found worrisome with Puységur and Petetin. To emphasize mesmerism's natural foundations, he drew an analogy with plant sensibility. Plants seemed to respond to stimuli, even from a distance, though they lacked an independent nervous system. Building upon this example, Rostan said that somnambulists did not so much see inside themselves (or others) as they experienced their sensibility more intensely. This intensification allowed them to attain higher awareness and perception, both for themselves and others. By amplifying sensibility, one had the impression of seeing within the self.[115]

One force seemed crucial: individual will. The will allowed the mesmerist to control the nervous system and forced it to obey his commands, creating within the patient "a singular exaltation of the brain."[116] And here mesmerism demonstrated how the imagination could effectively alter one's material reality—but only to a point. The world was not simply will and representation. There was nothing "marvelous" about magnetism, as Rostan emphasized; magnetism failed to cure, but it had therapeutic value, helping a patient master pain and discomfort. Yet this same force could be abused, if it fell into the hands of unscrupulous people—that is, folk healers and charlatans. In the name of professional integrity, trained physicians must monopolize animal magnetism and claim it for themselves.

Georget's and Rostan's appeals notwithstanding, it was Pierre Foissac who created the greatest uproar within medical circles. A graduate from the Paris medical school, he penned a short pamphlet titled *Mémoire sur le magnétisme animal* in 1825, and his impassioned pleas forced the Académie Royale de Médecine to reopen the mesmerist case in the following year. According to Foissac, animal magnetism offered real possibilities for sick patients, and the medical establishment could no longer afford to stand idle, allowing these insights to be monopolized by irregular healers and outright frauds (no doubt he had the controversial Abbé Faria in mind). Modern doctors, he observed, possessed all sorts of scientific understanding about health and sickness, but they couldn't use this abstract knowledge of clinical signs and symptoms to cure their patients. In particular, he pointed to infant mortality to underscore how scientific

medicine failed to address health care needs in society. "How many doubts in medicine!" he exclaimed. "Here the nature of disease escapes us; there, it's the treatment; and sometimes it's one and the other."[117]

By contrast, animal magnetism offered therapeutic hope and allowed patients to become more active partners in the healing process. Foissac wrote:

> What an extraordinary phenomenon for physiologists, that a person under the action of magnetism … falls into a profound sleep and remains submerged in an absolute nothingness. But as soon as the magnetizer speaks to him, a new life develops within himself, the sphere of understanding grows, and already there is manifested that incredibly precious faculty that the original magnetizers once called intuitive or lucid and upon which I will call your entire attention, because in it resides the entirety of magnetism.[118]

It was this "new life," Foissac said, that doctors should study for therapeutic purposes.

Because of these public appeals, the Académie Royale de Médecine returned to the mesmerist controversy in 1826. Though Puységur had died in the previous year, his forty-year crusade had forced the intellectual establishment to give animal magnetism another formal hearing—although most critics complained that the old Académie Royale des Sciences and Société Royale de Médecine had sufficiently studied the phenomenon and had given it a sound intellectual trashing. Yet now, doctors and academicians seemed genuinely curious about Puységur's and Deleuze's repackaging of the old doctrines and what it said about mind and body in therapeutic sessions.

The person who supervised the new investigation was Henri-Marie Husson (1772–1853). Like the scientific authorities who had conducted the first mesmerist inquest—Bailly, Lavoisier, Franklin, Vicq d'Azyr, and Thouret—Husson was a prominent physician and respected public figure. He had helped create, alongside Xavier Bichat, the Société Médicale d'Emulation, and later, in 1839, he became president of the Académie Royale de Médecine. His cautious and judicious nature gave the new investigations an aura of respectability. Husson's inquiry spanned over a decade, and it resulted in three separate commissions, each which issued its distinct report. Notably, the Académie withheld publishing the official conclusions—thereby creating a public atmosphere of suspicion and paranoia—though some of the documents were leaked to the medical press and later appeared in a variety of forums.

In many ways, Husson's inquests resembled the official investigations of the 1780s. Like Louis XVI's commissioners, Husson's group boasted prominent medical names. These included, among others, François Magendie, the great innovator in experimental physiology and skeptical empiricist; Théophile Laënnec, the inventor of the stethoscope and a staunch moral conservative; Jean-Marc-Gaspard Itard, one of the pioneers in sign language and education of the blind and deaf; and J.-E.-D. Esquirol, the noted psychiatrist and former pupil of Philippe Pinel. Like the academic commissioners in the 1780s, too, the new studies concluded that animal magnetism lacked any empirical basis. There were, as Husson's group emphasized, no special magnetic fluids in nature, whether in the individual body (as Puységur's partisans said) or anywhere else in the universe (as

Mesmer's old followers had claimed). As for somnambulism itself, they said, it seemed caused by suggestion or by the imagination.

So far, predictable: the commissioners in the 1780s had said the exact same thing. But now, by attributing somnambulism and animal magnetism to inner mental states, the commissions avoided so much damning mesmerist doctrine as they relegated it to an unproven and speculative realm of pain treatment. Animal magnetism constituted a weapon in the physician or surgeon's arsenal, one that could alleviate individual suffering, though it was one that the practitioner could use at risk to his professional reputation.[119]

This new understanding emerges in J. Amédée Dupau's book titled *Lettres physiologiques et morales sur le magnétisme animal*, which appeared in 1826, just as Husson launched further inquiries. Dupau had been following the mesmerist debate ever since the early 1820s. He had published weighty articles on magnetism in the prestigious *Revue Médicale* and had lectured on the subject at the Paris medical school while he was studying under Magendie. Like other doctors who broached controversial issues—an earlier model appears with Antoine Louis's book on premature burial and the medical diagnosis of death—Dupau framed his analysis in the form of an epistolary novel, using a set of letters to evaluate the alleged scientific merits of mesmerism. Throughout, in slippery ways, Dupau insisted that he both supported and rejected mesmerism, somewhat adopting the rhetorical move of "neither for/nor against" analyzed by Roland Barthes in his study of ideological myths.[120] Dupau supported mesmerism, in that he could attest to its therapeutic efficacy and the insights it opened into the inner world of his patients; but he was against it, also, in that he wanted doctors to assert a professional monopoly over the practice and protect it from charlatans and religious fakes.[121]

Dupau thus wanted animal magnetism without mesmerism or the mesmerist legacy. The latter, he asserted, remained sheer quackery, but animal magnetism itself held therapeutic promise. Puységur, he said, had changed how doctors understood animal magnetism, providing new experiences and insights by which to judge it. Somnambulism suggested something different from Mesmer's decadent theater: not the wild, convulsive scenes associated with his aristocratic and fashionable clientele, but rather a calm and lucid state, somewhere between sleep and waking, one in which patients became meditative and introspective—and one in which they gained a better understanding of their inner minds and bodies. As he saw it, the somnambulist state betokened "a concentration of intellectual faculties that explain the precision of ideas and man's rectitude of judgment." In this place, "outside of the domain of the sense," it seemed that "intellectual forces of somnambulism acquire greater power."[122]

Dupau insisted that animal magnetism constituted a physiological and *material* process linked to the brain and nervous system. Three factors apparently caused the somnambulist condition: in the first instance, a "nervous erethism," which Laplace had described in his *Essai philosophique*; second, "a lively and credulous imagination" in which the mind dominated physical sensation or transposed bodily perceptions; and lastly, a "disposition to some neuroses," as with catalepsy, in which the patient lapsed into nervous pathologies.[123]

At the same time, Dupau observed that German-speaking doctors had embraced the

new mesmerist doctrines, notably in the Berlin medical school, and he feared that French practitioners were losing ground to their colleagues east of the Rhine. Unlike Virey, who dismissed non-French approaches to medical philosophy, Dupau praised how German physicians had jettisoned the old mesmerist baggage and instead focused upon Puységur's essential point: how a Platonic, almost transcendental will could dominate and control mental and physical states. For Dupau, this insight was central. The imagination might not constitute a material reality, he said, but it was an observable and potent force nonetheless, one that could make a mirage into something real and tactile.[124]

These facts notwithstanding, Dupau worried that mesmerism could fall into the hands of quacks and unscrupulous laypeople. Since magnetism exerted such powerful "moral influence," it could become "poison" if used by the wrong persons.[125] He criticized medical practitioners who applied mesmerist treatments indiscriminately, and he lampooned one German-speaking physician, Wolfart, who had used animal magnetism in the Berlin hospital wards. The best solution, so far as he was concerned, was to treat mesmerism like any other secret remedy in France: subject it to empirical tests and then regulate it by law.[126]

That same year, in the wake of these debates, Deleuze also deferred to the judgment and authority of his medical judges. According to him, only medical professionals should adjudicate the mesmerist controversy and establish how animal mesmerism could best be used in the therapeutic setting.[127] As Dupau's writings demonstrate, however, even sympathetic doctors remained ambivalent toward the mesmerist cause, preferring to see animal magnetism as a risky enterprise, one the doctor should undertake only as a last resort. This point was underscored in the official reports published by the Académie Royale de Médecine in 1831 and 1837. Though debate continued in some sources—such as the *Gazette Médicale de Paris*, the *Gazette des Hôpitaux*, and the *Archives Générales de Médecine*—medical professionals seemed satisfied with this compromise solution.[128]

Consequently, the most devoted partisans of animal magnetism found themselves, once again, on the edge of objectivity, and so they increasingly abandoned scientific pretense and entered the world of spiritualism, mysticism, and the occult. Mesmerism metamorphosed into a salon pursuit in bohemian literary and political circles, developing a more heterodox and countercultural attitude found in the radical aesthetic and social thinking of the 1820s and 1830s. Utopianists, such as Charles Fauvety, who was a Saint-Simonian, and Victor Prosper Considerant, who followed Charles Fourier, found themselves drawn to mesmerist undercurrents,[129] as did the new aesthetic pioneers in French arts and letters, such as Honoré de Balzac, Théophile Gautier, and Alexandre Dumas.[130] George Sand, in particular, came out in support of animal magnetism, and the pro-mesmerist crowd found her conversion a hopeful sign for greater intellectual acceptance.[131]

However, this intellectual support was insufficient and forms a kind of coda to the mesmerist vogue in medical circles. By the late July monarchy, Puységur's mesmerism merged with the Lyonnais school of spiritualism and mystical freemasonry, and any interest in healing patients was subsumed under more religious speculation about the great "beyond."[132] The break between medicine and mesmerism became total. The

original confluence of trends—medical, philosophical, psychological—that drove the mesmerist renaissance in the Napoleonic and Restoration period collapsed, as doctors entertained some therapeutic insights from the movement but then drew firm boundaries against mystical or the supernatural entanglements.

The mesmerist renaissance provides a unique vantage from which to observe the broader dialogue between medicine and culture in the wake of the French Revolution, for it responded to concrete and pressing conditions within the medical and intellectual setting of the time. Three factors seem important.

First, Puységur followed the longstanding Enlightenment desire to find ultimate physical causes, and this desire distinguished the mesmerist renaissance from later scientific ideas about the human psyche. Significantly, when scholars have discussed Puységur, they often identify him as a psychological pioneer—potential charlatan he might have been—because he identified in somnambulism a radical otherness in the human self; it was an unknown topos, a secret and interior space that the subject could access but partially, by looking obliquely into the inner mind. In this regard, as Ellenberger argued, Puységur anticipated Sigmund Freud's and Pierre Janet's discovery of the unconscious and thus heralded the growth of dynamic psychiatry.

However, this analysis overlooks the intellectual world inhabited by Puységur and his fellow travelers. The new mesmerists thought less that they were identifying a hidden part of the human mind as they believed they were encountering a material force that animated mind and body. Once doctors and philosophers had understood this psychosomatic force, they could then use the mind's will to control and exploit it.

So when Puységur evoked this animating magnetic force, he hearkened back to a vast array of medico-philosophical ideas that Enlightenment doctors and scientists had long used to explain the mind–body problem: iatromechanists such as Hermann Boerhaave, materialists such as d'Holbach and Diderot, vitalists such J.-B. Stahl and the Montpellier physiologists, or traditional dualists like Albrecht von Haller and Samuel-Auguste Tissot, who had upheld mechanistic models but believed in an immaterial soul.

Like these doctors and naturalists, the new mesmerists sought a unifying force—in the Newtonian tradition—that regulated vital properties and governed all states of health and pathology. In their minds, this force was animal magnetism. For the older mesmerists, those who had participated in the debates of the 1770s and the 1780s, this magnetic force inhered in nature itself, in many ways remaining extrinsic to the body.[133] For them, the mesmerist healer must follow Rousseau's insight and reconcile the sick body with a nature that existed outside of self and society. Here, the individual experienced imbalance with the surrounding environment. By reconciling self and nature, the mesmerist restored harmony to the sick person and made them healthy and whole again.

Puységur and his followers took Mesmer's idea and instead located this restorative faculty within the individual's body and mind. This vital force responded, within the individual, to the power of the will; yet it could also harmonize with other people's bodies, as well—and the key to Puységur's work was that one person's magnetic experience could be brought to bear upon somebody else's. The magnetic force, he said, was "a fluid far more subtle and less apparent than blood, *but still the faculty* that they

have, more or less, to impart its emission of it to their fellow *human beings as much as they would like* [*sic*]."[134] It was, to repeat, a material force within the body, one that could control psyche and physiological function, but it was not an inaccessible element of the mind, something beyond one's awareness. In fact, it had one primary characteristic: the subject could control and exploit it with his or her *conscious* mind.[135]

There is a second point here, for the new mesmerists engaged a new intellectual understanding about the mind and the human will, all which engrossed a variety of philosophical, aesthetic, and scientific circles in the early 1800s. Doctors and laypeople interested themselves in mesmerism because it promised that individuals could control material determinants; it gave them a reflexive space from which they could exercise self-autonomy. Accordingly, the mind could probe the mysteries of sickness and health and then master them; one could overcome illness and pain by the force of will alone. And this is why the new mesmerism appealed to some of the leading minds of the early 1800s, notably Maine de Biran and Honoré de Balzac; these figures understood that mesmerism bordered upon the fantastic, but they toyed with it anyway because it suggested that sometimes the mind could assert dignity and independence even in the face of need. They wanted the mind to remain an active, and not a passive, force in human experience.

Yet doctors and naturalists also interested themselves in the new mesmerism because they hoped it might relieve pain and suffering. Though even sympathetic doctors largely considered mesmerism a dubious science, they thought it might help their patients, especially those who suffered from chronic pain or neurological disorders. Doctors are, after all, in the business of pain management, and at times they can entertain unorthodox or questionable treatments in order to relieve patient suffering, even when they neither understand nor fully trust the therapies they are dispensing. These therapies include not just trial remedies and procedures but also psychological approaches that involve metaphysical or mystical elements. This was particularly true with nervous disorders, where practitioners failed to master the patient's malady or identify its root causes. In such cases, physicians experimented with psychological treatments because they seemed less invasive and could calm painful symptoms. If the patient was satisfied with the regimen, no matter how speculative, so much the better. Sometimes therapeutic indiscretion was the better part of scientific valor.

And so, in the early 1800s, the new mesmerism satisfied three concerns: the need to identify unifying forces of mind and matter, the need to exert agency and control over natural and social determinants, and lastly, the need to contain physical and emotional suffering. So long as the new mesmerism paid lip service to natural causes and stripped itself of the garish ritual and display associated with Mesmer, practitioners could experiment with animal magnetism and the medical establishment could tolerate it for a time. However, when mesmerists increasingly embraced the supernatural and marvelous, physicians and surgeons abandoned the doctrine; in effect, these enthusiasts left little intellectual space for scientific observers to express a skeptical but indulgent attitude toward it. By the 1830s, most mesmerist partisans conceded that they were no longer functioning within the parameters of official medical science. But in the topsy-turvy world of postrevolutionary France, when medicine maintained more porous and hazy intellectual boundaries, the new mesmerism could flourish for a short while,

appearing as an unorthodox yet still plausible therapeutic system, one that spoke to the political and intellectual impulses that fixated the educated and leisured classes.

CHAPTER 8

Physiology as Literary Genre

Passions, Taste, and Social Agendas under the Restoration and July Monarchy

Between 1825 and 1842, another great cultural fashion hit Paris, one deeply steeped in the biomedical science of the day: a vogue for picturesque and satirical books called "physiologies." These best sellers were cleverly marketed and often satirized urban types and manners. The sales alone attracted some of the biggest names in the Paris intellectual scene, including Honoré de Balzac, George Sand, Gérard de Nerval, and Honoré Daumier. In 1841–1842, at the height of the craze, editors published about 130 different physiologies and sold half a million copies in Paris alone.[1] The satirical genre soon found itself the object of satire. One writer penned a verse called "The Physiology of Physiologies." It said:

> A physiology is a title,
> It's simply a question of finding one,
> One which is extraordinary,
> One which is impossible,
> One which will amaze,
> That done, all will be done,
> Because the whole book is really just on the first page.[2]

Though these physiologies constituted a striking cultural phenomenon in the

postrevolutionary decades, historians have not thoroughly analyzed their cultural, social, and, above all, scientific settings. When the genre is studied, scholars often focus upon the latter part of the craze, that of the 1840s, and underscore the journalistic or formal aesthetic qualities of the texts.[3] According to Judith Wechsler and Nathalie Preiss-Basset, these later physiologies constituted a "semi-journalistic genre." Publishers first serialized them in periodicals such as *Charivari*, and many of them appeared with the firm Maison Alibert. These texts developed from the vogue for Johann Kaspar Lavater's physiognomy and an earlier satirical fad called the *Codes*, which had also caricatured Parisian people, places, and styles.[4] The newer physiologies distinguished themselves because they self-consciously developed cultural stereotypes and engaged a broader range of urban middle-class experience. Walter Benjamin first characterized these books as "a petty-bourgeois genre from the ground up," while Judith Weschler has argued that these physiologies evince the first stirring of modernism—here understood as an art form that takes the modern experience as its subject matter.[5]

However, when scholars focus upon the more journalistic sensations of the 1840s, they can overlook the intellectual conditions under which the genre emerged in the 1820s and the settings for its success in the next two decades. This neglect is unfortunate because the physiological genre casts considerable light upon important dynamics between medicine, readership, and subcultural values at the time. A notable exception is Juan Rigoli, who has examined how physiological writing intersected with novelistic form, especially in the works of Honoré de Balzac, Gustave Flaubert, and Émile Zola. Whereas Rigoli's analysis often concerns itself with the persistence of literary form, as part of an unconscious substratum,[6] I am more interested in the cultural generation of this style and the immediate intellectual and political factors that shaped it.

The early physiological craze shows how conventions of medical writing had begun to influence general approaches to literary form and content, providing both a style and vantage point from which writers could approach their subject matter and deal with the question of mimesis or verisimilitude. Further, it shows how the boundaries between the sciences and the arts remained fluid in the first decades of the nineteenth century, providing ample ground for reciprocal curiosity and cross-fertilization, notably on the more formal and elevated aesthetic plane. These new forms of literary style soon came to influence medical discourse itself, as doctors drew upon these trends to fashion their texts and address broader audiences within the literary public. In the "physiological style," biomedical science provided both a tool and template for writing, a relationship emblazoned in the genre's self-moniker itself.

In what follows, I analyze the emergence of the physiological literary genre in the 1820s and 1830s, focusing upon four of the genre's defining works: Dr. Jean-Louis Alibert's *La Physiologie des passions* (1825), Jean-Anthelme Brillat-Savarin's *La Physiologie du goût* (1825–1826), Honoré de Balzac's *La Physiologie du mariage* (drafted in the 1820s but published in 1830), and Dr. Morel de Rubempré's *La Physiologie de la liberté* (1830)—the last which appeared in the aftermath of the July Revolution. Throughout, I focus upon how these works emerged from techniques of analysis and narration found in physiological medicine, as authors and editors capitalized upon the successes (and scandals) associated with the new physiological science, as it emerged in the early 1800s,

but also how these texts engaged particular political and ideological realities of the postrevolutionary decades.

Physiological science, I argue, influenced the literary genre in two ways. On the one hand, physiology imparted an observational and analytic style that writers used to explore and expound upon their selected topics, whether the emotions, food, marital relations, freedom, and so on. On the other hand, physiology shaped the structure and format of the literary genre itself, as writers adopted the formal techniques by which editors and publishers assembled medical books and then skillfully marketed them to lay audiences. In turn, these literary and commercial techniques influenced physician-writers as well, mainly when they wandered into writing about moral and philosophical issues.

In all this, doctors and authors turned physiology into a unique—albeit short-lived—literary genre. The genre situated itself less in caricature than a more digressive, associational literary style—a style that evoked the more experimental novels of Lawrence Sterne and Denis Diderot, but one that also betokened formal innovation to come. Here, writers toyed with medical and literary conventions: they sought to create a "scientific" rendering of social and natural phenomena, but in ways that were nonnarrative, witty, and often subversive. In this regard, the physiological style and ethos differed from the more clinical medical style later used by Gustave Flaubert and Emile Zola (the latter who drew upon Claude Bernard's method of experimental physiology), whose style and technique sought a purportedly realistic and omniscient voice when narrating human reality and experience.[7] Instead, these earlier physiological writings remained more diverse and fragmented in perspective and tone, offering more of a personalized or idiosyncratic understanding of the social and natural world, one that captured the conflicted and confused visions of the postrevolutionary years. It drew upon the full gamut of medical genres and audiences, ranging from natural histories to physiognomies, sex manuals, mesmerist apologias, and even the Marquis de Sade's libertine strategies. It is a fitting close to this study.

Modern physiological science—that is, the experimental study of organic function—emerged in France between 1795 and 1821. The real pioneers were Xavier Bichat, François Magendie, and later Claude Bernard. Experimental physiology drew energy and inspiration from the new clinical science being developed at the Paris hospitals, as well as simultaneous advancements in the physical, chemical, and mathematical sciences. In turn, medical reformers incorporated physiological science into the clinical curriculum, while major scientific figures, notably the mathematician Pierre-Simon Laplace and the comparative anatomist Georges Cuvier, mentored the newborn science at the Institut National de France. Within a few short decades, experimental physiology attained, in the eyes of many contemporaries, the status of "positive" science.[8]

Physiological science appealed to a wide diversity of thinkers and writers in the sciences, arts, and letters of the Restoration period between 1815 and 1830. As Barbara Haines pointed out, physiological science drew leading figures across the intellectual and political spectrum, who found in it a powerful tool for diagnosing the social and natural world around them. This list includes Utopianists such as Henri de Saint-Simon and Charles Fourier, the positivist Auguste Comte, spiritualist and Eclectic philosophers such

as François-Pierre Maine de Biran and Victor Cousin, and ultramontanes such as Louis de Bonald and Joseph de Maistre, to name a few.[9]

Paradoxically, as L. S. Jacyna has shown, these intellectuals were seldom interested in experimental physiology as a distinct field of study itself.[10] Instead, they drew upon a different biomedical tradition: the "science of man" or "physiological" or "anthropological" medicine. Here, as seen in previous chapters, doctors studied the relationship between body and mind—in their lingo, the moral and the physical—so that they might explain the human character and physical temperament and thus advance medical knowledge.[11] In this regard, physiological science constituted less an experimental-mathematical science, than, as Dr. Paul-Joseph Barthez put, "the Science of Human Nature."[12] By studying the living body, doctors could uncover the foundations of the self; it was an approach that aspired to explain all moral, mental, and physical elements of human experience, and one that fully illuminated the relationship between individual and society. Some commentators even dubbed it a "medico-metaphysical" form of analysis.[13] Interconnections were central. As one physician noted, "The operations of the animal economy are all interconnected and dependent upon one another. They form a kind of circle."[14]

This "physiological medicine" influenced "physiological literature" in three ways. First, physiological medicine provided doctors and writers with important moral and methodological assumptions about studying vital phenomena. According to this interpretation, life was unique and special and set apart in the natural world—and this was especially true when considering the dynamics of human life. These ideas were expressed, in eloquent fashion, by Xavier Bichat in his physiological writings. According to him, life was a precious but limited resource. Living beings contained within themselves a "determinate sum" of vital energy, which they exhausted so to sustain themselves. At the same time, life was dynamic and ever-changing, and it was characterized by individuality, spontaneity, and complexity. In Bichat's words, living beings thus "escaped from all form of calculation.… One can foresee nothing, predict nothing." Laplace's mathematics and Lavoisier's chemistry—neither were sufficient for grasping the human condition.[15] This sensibility informed the original *prophètes-philosophes* and the later medical undercurrents associated with physiognomy and animal magnetism following the French Revolution. The difference with physiological medicine was its high status with the broader sciences and letters.

In this manner, doctors insisted that they needed special tools and methods to understand these heterogeneous and irreducible qualities of life. And here physiological medicine gave doctors and social thinkers a concrete method for understanding vital phenomena, one rooted in Condillac's method of "decomposition" and analysis. A good example appears in Charles-Louis Dumas's well-known textbook on physiology. For him, physiological science had three primary branches: the theoretical, the experimental, and the practical or therapeutic. These three branches combined both empirical and rationalist techniques, thus enabling doctors to understand living function in holistic terms. In Dumas's opinion, physiology had become a comprehensive system for studying life; it was, he said, "more positive, more exact, [and] more certain."[16]

While physiological medicine commanded authority and prestige in many intellectual

circles, it could also incite outrage and scandal in others. And this brings me to the second medical influence on physiological literature: the debates that doctors sometimes engendered when they asked controversial questions about the meaning of life and the ultimate causes behind vital phenomena. These conflicts have been studied elsewhere and need only a short review here. As scholars have shown, these medical practitioners divided into two camps: the physiologists and the spiritualists. The physiologists were associated with Pierre Cabanis, the phrenological duo Franz Gall and Johann Gaspar Spurzheim, and the flamboyant and controversial François-Joseph-Victor Broussais. The spiritualists, by contrast, were associated with the physiologist Frédéric Bérard, the neurologist Nicolas-Philibert Adelon, and the skin doctor Jean-Louis Alibert (who will be discussed presently).[17] In public fora, these doctors passionately debated whether or not material qualities—what they called "animal organization"—determined all sensation and conscious thought sui generis, or whether living matter needed some outside principle—that is to say, a soul—to animate it and make it think for itself. As Jan Goldstein has argued, these acrimonious exchanges caused many in the literate public to equate "physiology" with radicalism, philosophical materialism, and even atheism.[18] For this reason, more religious and spiritually minded practitioners, above all Bérard, pleaded with his colleagues to redeem biomedical science by purging it of all its radical, materialist, and secularist tendencies.[19] Despite this overheated and sometimes nasty polemic, materialist doctors did the profession a service in keeping its doctrines in the public eye, helping consolidate its reputation as a dynamic and vital field, one capable of inciting serious debate and controversy.

Last but not least, enterprising doctors and publishers discovered that physiological ideas caused public scandal and could thus sell books to general readers. Already by the late 1790s, these books were rolling off the presses. These texts were often cheaply made and accessible to general readers, though some did appear in deluxe folio editions, no doubt aiming for more high-end readers. This publishing reality formed an essential part of the physiological genre, not just with its subject matter but also for how editors put such books together, how they marketed them, and for what reasons readers bought them.

In this manner, these physiological books emerged out of the medical undercurrents that I've been describing in this book: texts such as J. M. Plane's *Physiologie ou l'art de connaître les hommes sur leur physiognomie* (1797), Julien-Joseph Virey's *Histoire naturelle du genre humain* (1800–1801), Louis Robert's *Essai sur la mégalantropogénésie, ou l'art de faire des enfants d'esprit, qui deviennent des grands hommes* (1801), J.-L. Moreau de la Sarthe's *Histoire naturelle de la femme* (1803), and the scores of books on Johann Kaspar Lavater's physiognomy and Franz Gall's phrenology.

These popular books, it is important to reiterate, shared a standard style and structure. Publishers and editors obviously wanted to sell books by informing and delighting readers. And to do so, they sometimes touched upon controversial or taboo subjects, ranging from sexuality to materialist philosophy, and employed a saucy or salacious or seditious tone. These books often featured illustrations, as well, and some, at times, contained explicit or exploitative images, such as those of hermaphrodites and birth defects.

More significantly for present purposes, these popular "physiological" books often contained, between their covers, several other books or parts of books. Like Salvage with his morgue specimens, writers and editors would pull together a corpus of materials—reports and documents from natural histories, medical case studies, and travel accounts—and sometimes they even cannibalized their competitor's books, as when Louis Robert imported huge sections of Lavater's physiognomic writings into his book on "mega-anthropogenesis." In principle, these inserted texts illustrated specific analytic or narrative points, but sometimes they could eclipse the main text itself, potentially absorbing the reader's entire focus.

No doubt, publishers and editors packaged these books in such a way to sell more of them, providing a "two for one" bargain. At least one writer, it may be recalled, when reviewing Robert's book, took a dim view of such "creative appropriation" and just called it plagiarism. At the same time—and this point is crucial for future literary physiologies—this editorial packaging gave such books an anthologized, digressive, and nonnarrative structure to them. They packed together textual bits and pieces, jumbled together in the folio or octavo format. It this sense, it encouraged a style of writing and reading that seems unusually fragmented or discontinuous. Readers could readily dip in and out of these books and ponder and use them as they saw fit, but all at their own pace. These books offered less a lecture than a dialogue. Strikingly, this conversational or dialogical quality characterized the literary physiologies that were written by Alibert, Brillat-Savarin, and Balzac—those whose style and structure to which we now turn.

This medical and literary backdrop helps set the stage for Dr. Jean-Louis Alibert's best-selling *Physiologie des passions*, which first appeared in 1825. The book proved an immediate success, undergoing multiple editions, revisions, and translations in the 1830s and 1840s. In this text, Alibert drew upon the scientific and stylistic strands that characterized the gamut of medical writing on physiology, but he wove from these disparate strands a distinctive literary form and narrative style, one that structured later "literary physiologies," above all those of Brillat-Savarin and Balzac. But Alibert established the genre. He wrote a physiology which, at first glance, did not look like a physiology at all.

Alibert's background helps illuminate his book and its underlying moral and political agenda. He was born in 1768 in Villefranche, a small town in Aveyron, and he came to Paris in 1794 to study medicine, just when Thermidorean legislators and major physicians and surgeons began their massive overhaul of the health care system. He rose rapidly in the ranks. At the Paris clinics, he studied with luminaries such as Pierre Cabanis and Philippe Pinel; he cofounded, with Xavier Bichat, the Société d'Émulation Médicale, and he first associated with the Idéologue philosophic circle, who were known for their materialist and republican sympathies. Under the Empire, however, his political and social commitments became more conservative, perhaps as much from private belief as from professional opportunity, and his career benefitted handsomely. Under Napoleon, Alibert became director of the Saint-Louis hospital, where he specialized in treating skin disorders and where consolidated his reputation as a pioneer in dermatology. In 1815, he was appointed court physician to Louis XVIII. By this time, he had established himself as

a player in the political and cultural world of the Restoration period (fig. 8.1).[20]

Not surprisingly, given his conservative patronage and social circle, Alibert voiced strong religious or spiritualist sentiments, and he long doubted the Enlightenment's intellectual and moral heritage. In one of his early publications, which appeared after the Reign of Terror, he urged the French government to promote civic duty and moral values, and he signaled his aversion to popular politics.[21] Over the years he continued this line of argumentation and criticized the French Revolution's impulses towards "perfectability" and anarchic violence. Whereas physicians such as Pierre Cabanis argued that doctors should be teaching metaphysicians about mind and morality, Alibert countered by saying that metaphysicians could teach doctors about "the history of sensations, ideas, the passions, and other moral phenomena of animated existence."[22]

In crafting his book on the passions, Alibert drew upon Frédéric Bérard's spiritualist physiology and insisted that medicine and metaphysics went hand in glove. Each, he said, illuminated the other in crucial ways.[23] According to him, physiologists could learn one capital point from metaphysics: that people possessed an immortal soul. This soul imparted innate characteristics to the person and further gave them moral freedom, something he perceived, rather like the philosopher Maine de Biran, in neo-Kantian terms. By contrast, he said, physiologists could teach metaphysicians that human thought and sentiment evolved in a physical or natural context. In this manner, physiologists could help explain, in clear terms, of what people were capable and whether or not human nature could be changed. Medical science thus illuminated proper human boundaries and limits, thereby clarifying human realities and helping metaphysicians maintain moral order.[24] According to one of Alibert's later editors, the book reconciled science and religion, showing how each field could help society by working together.[25] This was a project that physicians such as J.-F. Bertrand and Léon Rostan had hoped to accomplish with animal magnetism, of course, but Alibert never abandoned the formal tools of objective and empirical analysis. With his formal writing style and technique, however, he went in an entirely different direction.

Fig. 8.1. Jean Louis Alibert (1768–1837) (s.d.). Code: CIPB1553. Bibliothèque Interuniversitaire de Santé, Paris. Though schooled in Idéologue philosophy, Alibert's work became increasingly conservative and religious in the early 1800s.

For all these reasons, Alibert chose to write on the human passions, or what one might anachronistically call "the emotions." No doubt, in postrevolutionary society, emotional display and passionate opinion seemed to pose all sorts of dangers. Already, by the 1820s, there existed an extensive philosophical and theological literature on this subject.[26] For his part, Alibert chose to situate his physiology in the more modern philosophical tradition established by René Descartes and Marin Cureau de la Chambre, and which had been explored by leading Enlightenment thinkers ranging from J.-J. Rousseau to Cesare Beccaria. According to both Descartes and Cureau de la Chambre, the passions resided within the body, forming part of the physical apparatus of sensation, which they distinguished from an immaterial and rational soul. The danger, as they saw it, was that the passions could disrupt the workings of human reason and moral sense and so people must learn to control these impulses for them to live the good life.

By the time that Alibert took up this subject, moral philosophers had come to see the passions in an even more negative light, blaming them for all the excesses of the French Revolution. Prominent medical authorities agreed upon this point. For example, the psychiatrist Jean-Étienne Esquirol said that excessive passions could provoke mental disorder, overriding the body's natural functions,[27] while Xavier Bichat opined that the passions constituted an inner organic reflex that eluded conscious or rational control. One physician, G. M. Royer, claimed that they caused all human suffering—even to the point of precipitous death.[28]

For Alibert, Esquirol's and Bichat's ideas smacked too heavily of materialist determinism, for both doctors suggested that biological drives could dominate a person's free will. Such an interpretation, as religious conservatives liked to point out, undermined individual autonomy and, ultimately, personal responsibility for one's moral actions. Consequently, Alibert joined his spiritualist colleagues in trying to affirm what they called "human dignity," and he looked to vitalistic medical traditions, above all those associated with Montpellier physicians such as Pierre Roussel and P.-J. Barthez.[29]

Following Immanuel Kant, Alibert said that humans possessed an inner moral instinct, one that was independent of material qualities, which allowed them to discern moral behavior like the eye could discern a beam of light. While the passions could subvert one's reason and self-control, individuals could always choose their course of action and were thus morally responsible for the things that they thought and did. Hence, Alibert promoted a severe stoicism, rejecting any Epicurean belief, and equating it with personal courage.[30] A person must always control mind and body, limiting all emotional excess, steering oneself toward a middle ground of virtuous living.

In the hands of a less gifted writer, all this stuff would have made a dreary homily. However, Alibert's wit, his anecdotal style, and his storytelling talents made his book a fantastic read for contemporaries.

In his physiology, Alibert began by describing moral sentiments and the human sensory system, translating technical ideas into graceful prose. Alibert said that the passions originated from four primary forces in the sensory system. He followed the naturalist J.-B. Lamarck and called these forces "primitive impulsions" or instincts. There were four of them: self-preservation, imitation, sociability, and reproduction. These instincts, in turn, determined all affective states and shaped how people interacted with

each other in society.

Alibert elucidated all the possible combinations. In the human heart, then, self-preservation inspired egoism, avarice, pride, vanity, modesty, courage, prudence, laziness, ennui, and intemperance. Imitation inspired emulation, envy, and ambition. By contrast, sociability inspired different kinds of emotional responses, ranging from kindness to friendship, esteem, respect, consideration, contempt, mockery, pity, admiration, enthusiasm, gratitude, hate, resentment, vengeance, justice, love of war and glory, and love of home and country. Finally, reproductive instincts inspired qualities such as conjugal love, maternal and paternal affection, and filial devotion.

Albert then turned to analyzing each instinct and its corresponding passion. In striking ways, he conflated the passions with specific character types, identifying them as fatuous, ambitious, vain, charitable, and so on. He then recounted various anecdotes or provided observations to personify these emotional types even further. At critical moments, he inserted lengthy and self-standing stories to illustrate these emotional types, just as popular medical books had inserted outside documents and reports to explain detail or generate reader interest.

These stories constituted the heart of Alibert's book and formed the basis of its literary success and acclaim. Often he culled these stories from medical reports or his experiences at the Bicêtre and Saint-Louis hospitals, but they differed stylistically from the technical accounts one would find in clinical case studies. These narratives helped establish Alibert's moral and political agenda and reiterate his belief that individuals must moderate their emotional lives and reconcile themselves to their present political and social situation.

His examples were striking. In "Le Pauvre Pierre," Alibert told about an old Napoleonic veteran—a global traveler, it turns out—who ended up, penniless and homeless, at the Saint-Louis hospital—and who edified his fellow patients with his lessons on stoic control and self-resignation.[31] From the Bicêtre hospital came the case history of an "ambitious crazy man"—one of Philippe Pinel's patients—whose vanity and resentment had driven him to debilitating monomania, giving a case lesson about how ideological passion and political opportunism could combine in destroying an individual's life. Elsewhere, Alibert reconstructed the history of a plague outbreak in his native Villefranche in 1627, using the incident to demonstrate how feelings of pity and charity could help salvage a community. Not surprisingly, Alibert's heroes in this story were a royal magistrate and a Franciscan priest.[32]

Sometimes Alibert's stories assumed the status of independent novellas. For example, in a piece called "The Servant Maria," an Italian physician recounted how a young domestic servant mastered the art of sculpture and even completed a stunning image of the Greek goddess Athena. As the tale went, however, the young woman died at the height of her powers, having depleted all her vital energy through the exercise of her desire and spirit (a fictional retelling of the real case of Jean-Galbert Salvage).[33] In another story, "Couramé, or the Love of Country," Alibert took a page from Châteaubriand. Here, a colonial doctor from Cayenne told how a lost native girl yearned so deeply for her lost people and homeland that she ended up absconding with another young native—an earnest warrior—and they started a family together. The colonial doctor was so

moved by her determination that he abandoned his colonizing mission and returned, like a home-sick émigré, to his native land of France.[34] Finally, Alibert also provided several fantastic dialogues—almost reminiscent of the style Diderot employed in works like *Jacques le Fataliste* and *Le Rêve de D'Alembert*—giving a conversation in afterlife between Epicurus and Pythagoras about the virtues of self-control and moral restraint.[35] Similar techniques, of course, had also emerged in Jean-François de Saint-Lambert's *Analyse de l'homme et de la femme* and the Marquis de Puységur's and Antoine Petetin's respective case histories of somnambulism and catalepsy.

Alibert's storytelling baffled medical reviewers, who did not know what to make of his book, especially given his scientific credentials. For them, Alibert's physiology failed to resemble a medical study at all. Instead, it appeared to be a strange novel, an open-ended and digressive text that evoked more Lawrence Sterne's *Tristram Shandy*, skirting the boundaries of conventional scientific and literary storytelling.[36]

The medical criticisms notwithstanding, the evidence suggests that his book resonated within fashionable intellectual circles, including those associated with the new bohemians and Romantics. For example, the poet Marceline Desbordes-Valmore, best known for her sentimental writings such as "Notre Dame des Pleurs," composed verses on the story of Pauvre Pierre. Another poet, Louise Colet, hoped to edify her Parisian devotees with her lines on the homesick Couramé. Alibert also inspired the Romantic dramatics Michel Pichat, best-known for his works Léonidas and Guillaume Tell. For her part, Teresa Guiccioli, the celebrated mistress of Lord Byron, composed sonnets on the servant Maria. Finally, François-Adrien Boieldieu, one of the leading operatic composers of the Restoration period, set some of Alibert's vignettes to music.[37]

Alibert understood the recipe for his success. In subsequent editions of his book, he kept adding more and more stories—including one on the maritime explorer and hero Jean-François de La Pérouse—as well as more illustrations. He also revised and expanded his section on love and sexuality. By 1843, the book was appearing in a four-volume cheaper *duodecimo* edition, which editors designed for the low end of the reading market.[38]

One final point on Alibert's style and its influence. Despite his religious conservatism, Alibert maintained a nuanced tone in his book. He was less dogmatic than humanistic, if not charitable, in diagnosing the human condition. For him, humanity was trapped between freedom and necessity. Though individuals could use the former to dominate the latter, this moral high road was not easy to traverse. The instinctual passions could always corrupt higher human values and sentiments—whether love, charity, devotion, or sacrifice—and thus compromise one's moral compass and responsibility. But there was hope, said Alibert. If individuals mastered their emotional life, they could then transfigure the passions, turning them into sensations of pleasure and joy, all within the sanctioned realm of morality and ethics. And it was this insight—self-mastery as creative sublimation—that both Brillat-Savarin and Balzac developed in different ways in their physiologies.

Brillat-Savarin's celebrated *Physiologie du goût* appeared in December 1825 and capitalized upon Alibert's success. Scholars often credit Brillat-Savarin with founding French

gastronomy, and his book has since become a minor classic in the history of French letters. According to some interpretations, Brillat-Savarin helped establish gastronomy as an actual "science" and thus consolidate its intellectual status against its leading professional rivals: the cooks and the restaurateurs. Here Brillat-Savarin's agenda appears as "one of complete technical mastery of the world."[39] But this reading somewhat distorts Brillat-Savarin's purposes and how he appropriated medicine and science, which was not so much a way to justify or rationalize a point of view as a way of exploring ideas and objects. Put otherwise, medicine was less prescriptive than a way of engaging his unsuspecting audience. Brillat-Savarin wanted his book to offer readers a distinct literary experience—something, like a surprising culinary dish, they had not quite savored before.[40]

Brillat-Savarin's biography, like his book, was filled with extraordinary escapades. Like Alibert, he was too born in the provinces, far from the hustle and bustle of Paris life. Originally he hailed from Ain, near Lyon, and he made his reputation there as a judge. In 1789, he was elected as a representative to the Estates-General, where he engaged himself in the political and social debates of the time. Not surprisingly, perhaps, he was proscribed during the Reign of Terror, and so he fled France, first going to Switzerland, and from there he journeyed to the Americas, joining a contingent of émigrés in the United States that included the future king Louis-Philippe. In New York City, he sustained himself as a violinist and went about exploring the American wilderness. After Napoleon's coup d'état, Brillat-Savarin returned to Paris and resumed his work as an attorney, and now he began writing in earnest. Though he nominally supported the Restoration government, he never became, like other émigrés, embittered and reactionary in his outlook. In his book on taste, Brillat-Savarin rejected the ingrained ideological angers and political passions of many of his compatriots, and he seems to have wanted to transcend the traumas of the postrevolutionary decades. And unlike Alibert, who attacked materialist philosophy, Brillat-Savarin allowed religious principles, tradition, and medical materialism to coexist merrily in his writings (fig. 8.2).

In his physiology, Brillat-Savarin argued two points. First, he wanted to establish gastronomy as a legitimate branch of knowledge, something akin to a positivist science. Nonetheless, Brillat-Savarin likely did not take such scientific claims with too serious a stride. For example, he called his literary approach a form of "transcendental cookery," playing on the "transcendental anatomy" associated with Étienne Geoffroy Saint-Hilaire.[41] Second, Brillat-Savarin used his book to offer a reasoned apologia for gourmandism. Gourmandism, he insisted, failed to constitute a form of gluttony and therefore it was not a sinful activity. Rather, he said, it constituted a refined and learned pleasure. Quite simply, life was too short and unpleasant—he had absorbed Thomas Hobbes's essential sermon—and so people ought to learn to please themselves in whatever manner they could. And the best place to do so—outside of the bed chamber—was at the dining table.[42]

Gourmandism, Brillat-Savarin told his readers, added to the "sum" of human happiness and thus advanced civilization.[43] Fine eating sweetened society's morals and manners. It was eminently sociable, and it even made married couples happier late in their lives, because it gave them something to talk about in the evenings, long after the

marital flames had cooled. After the Napoleonic wars, gourmandism abetted France's economic recovery and revived the arts and letters, rousing the people from the aftertaste of defeat and occupation. The table did not fully exemplify the economist and physician Bernard Mandeville's thesis of "private vices, publik benefits," but like that other French custom—coquetry—it constituted a source of national pride and honor.[44]

D'APRÈS LAMBERT.
Typ. Henri Plon.
Réimpression de l'Ancien Moniteur. — T. V, page 313.
J.-Anthelme Brillat-Savarin, né le 2 avril 1755, avocat,
député des bailliages de Bugey et Valromey à l'Assemblée constituante.

FIG. 8.2. Jean Anthelme Brillat-Savarin (1755–1826) [par H. Plon], (s.d.). Code: anmpx11x040. Bibliothèque Interuniversitaire de Santé, Paris. Brillat-Savarin juxtaposed physiological analysis with a kind of *bonhomie* intended to transcend postrevolutionary differences.

Given this agenda, Brillat-Savarin's book might seem, like Alibert's, a physiology with no physiology. In reality, Brillat-Savarin's book was steeped in medical knowledge and lore. Physiological science itself provided his book with its own language and structure. As Brillat-Savarin put it, medicine remained one his "favorite" hobbies—alongside chemistry—and if he could live his life all over again, he said, he'd become a "qualified doctor" and write the definitive "monograph on obesity"—something which he acknowledged was one of the new blights of French society.[45]

Brillat-Savarin celebrated individual doctors and medical breakthroughs. His book even featured cameos from leading physicians. Alibert, for one, appeared in the text, as did the phrenologists and neurophysiologists Franz Joseph Gall and Johann Gaspar Spurzheim. Then there was the prominent hygienist and social crusader Louis-René Villermé, spouting his demographic statistics on diet and poverty, as well as Napoleon's doctor, the renowned cardiologist Jean-Nicolas Corvisart, famed for his pioneering of primary auscultation, and whom Brillat-Savarin gently rebuked for his poor bedside manner and ill humor.

Above all, Brillat-Savarin praised Dr. Balthasar-Anthelme Richerand, the prestigious Parisian medical professor, who had written the leading textbook on medical physiology, a book which had undergone an astonishing ten editions between 1801 and 1833. Brillat-Savarin informed his readers that Richerand himself had encouraged him to publish his "gastronomical speculations." In the book's opening pages, he even presented a fictitious dialogue between Richerand and himself (taking a page from Alibert's dialogues). Here, he praised Richerand's medical acumen and his healing skills, but then chastised him for eating too quickly when at the table.[46]

In typical fashion, Brillat-Savarin first presented this fictitious dialogue with Richerand but then digressed to another topic. In the following pages he provided a brief medical history of his provincial homeland and celebrated all the medical luminaries who hailed from his town of birth, Belley. But he saved the best for last, revealing to his readers that the most local physicians were Richerand—who turns out to be his godson—and that tempestuous physiological genius, Xavier Bichat.[47]

Beyond these anecdotes, physiological science also informed how Brillat-Savarin understood human nature. Unlike spiritualists such as Bérard and Alibert, Brillat-Savarin described people, in explicit Epicurean terms, as animal-like (if not bestial) in their nature and put them into a frank evolutionary environment. He estimated that this animal nature made humans into carnal beings, beings who were driven by essential appetites and violence. As he saw it, people possessed a "sixth sense" or what he called *génésique* or physical desire (recall that the new mesmerists had also spoken of an intuitive sixth sense). For Brillat-Savarin, at least, this sense created the human instincts for self-preservation and reproduction. These instincts, in turn, consumed the body's vitality, forcing it to refurbish its lost force and energy. Hence, humankind's three needs: food, rest, and sex. In short, he envisioned Condillac's "sensible statue"—that great metaphor of the Enlightenment—coming to life and then going out to get itself some food and a bit of pleasure before returning home to sleep.

This animal nature inspired what Brillat-Savarin saw as the more human need to build and to embellish. In Brillat-Savarin's mind, humans took restorative instincts—eating,

sleeping, having sex—and turned them into pleasurable and refined activities, all of which were characterized by ornament, complexity, and diversity. He thus maintained a Baconian belief in the fortunate fall, a faith which tempered his religious-conservative leanings. For him, pleasure was not a limited resource at all—a fact that distinguished it from the body's limited sources of vital energy (a point hammered home by the physiologist Bichat). Against this view, Brillat-Savarin argued that physical pleasure and joy were potentially infinite.

For this reason, Brillat-Savarin praised science and technology in fulsome terms, as he hoped physiological science would one day unlock all the secrets of human sensation and allow people to invent whole new tastes and pleasures. In his estimation, recent history provided optimistic examples. For instance, musicians had refined harmonic and polyphonic structures, and cooks had shifted from "simple" to more "complex" savors when preparing their dishes. Progress and improvement were both possible, he averred.[48]

More to the point, physiological science helped explain taste itself, the ostensible subject matter of Brillat-Savarin's book. He drew upon the cerebrospinal studies of Gall and Spurzheim—their radical materialism notwithstanding—on the localization and "multiplicity" of brain functions. Following their research, Brillat-Savarin insisted the taste was an innate quality, something rooted in a specific part of the brain. It was possible that a person was born without it, just as some unfortunates lacked sight or hearing from birth.[49]

Given these instinctive qualities, gourmandism was for some people an irresistible penchant, marking them like any other genius or virtuoso, as somebody who could excel on a musical instrument or master the art of dance. Taste was like the mind itself: multiple, fragmented, and relative to one's birth and subsequent station in life. Through this means, he endeavored to map out a taxonomy of gourmands and identify the types of people drawn to the pleasures of the table. In his view, gourmands were distinguished either by their character or their professional vocation. He praised financiers, men of letters, leisured women, and doctors for their good taste and table manners.[50]

Throughout, Brillat-Savarin used physiological science—especially the organicist, materialist vision espoused by Gall and Spurzheim—to describe the self in his idiosyncratic manner. However, it also reveals more ambivalent and nuanced attitudes, suggesting that ideas about selfhood and self-talk were more multiple, complex, and multilayered than just reflecting a stark dichotomy between spiritual holism and materialistic fragmentation.[51] For Brillat-Savarin, physiology was less a springboard for philosophical radicalism, as it had been with Broussais and some of his partisans. Nor did it cause him to panic about the existence of a unitary self and thereby threaten spiritualism or underlying moral precepts, as with Eclectic philosophers such as Victor Cousin. Rather, for him, physiological science opened space for play and pleasure, a source of humor and bonhomie. It deepened sensory experience and intellectual appreciation, allowing people to better contemplate and experience the world around themselves.

At the same time, Brillat-Savarin acknowledged that taste and instinct were sometimes elusive and difficult to understand. He heaped aristocratic scorn upon what he saw to be the "common" or vulgar herd—those people who were lacking in distinctive qualities

and taste—while all along insisting that taste was infinitely individual and variable.[52] Universals here failed to apply. Taste, for Brillat-Savarin, was always relative—so long as you knew what you were talking about: *de gustibus non est disputandum*.

Beyond these physiological ideas and allusions, Brillat-Savarin appropriated the form and style found in popular medical physiologies. As with Alibert's book, Brillat-Savarin told not just one story, but many. (It was an approach that Honoré de Balzac would develop even further in his physiological study of marriage.) Brillat-Savarin insisted that he found that writing merely constituted an "amusing occupation" and said that he had never aspired to become a real or serious author.[53] Rather, he wanted his physiology to delight readers. His book, as he put it, should serve people a dish of science that they might readily digest. In this spirit, he distinguished between what he called reading "in respectful science" and what he thought of as "taking part in a conversation."[54] In other words, in the language of literary theory, Brillat-Savarin distinguished between an "authorial" and a "dialogic" style of writing, between writers who lectured their readers or those who engaged them in an interactive dialogue. Clearly, Brillat-Savarin preferred the latter style.

To achieve this literary effect, Brillat-Savarin divided his book into "physiological meditations" (no doubt evoking René Descartes's classic philosophical work, the "metaphysical meditations"). He larded these "meditations," in an almost Shandean fashion, with boundless anecdotal digressions, romping all over the intellectual terrain. These digressions, with their pleasant and witty associations, sought to substantiate an ideal dinner conversation: the book as a complement, like a good wine, to a well-cooked meal. In a sly manner, Brillat-Savarin called these digressions "true stories," "anecdotes," "pleasant memories," and "philosophical reflections"—the very titles which seemed to undermine their credibility. To paraphrase a more modern author, Cormac McCarthy, they may not have been true stories, but it was true that they were stories—and good ones, at that.

As with Alibert's well-crafted tales, Brillat-Savarin drew upon his encyclopedic memory and extraordinary life, all of which constituted an important part of memory and imagination for him. He told nostalgic stories about the Old Regime and his adventures in New York.[55] There were natural histories on subjects as diverse as turkeys and sugar beets, and he included his physiological-chemical ruminations which he called, with his usual ironic wit, "gastronomical experiments." He peppered his stories with realistic flourishes like patois banter and phrases in Spanish and English, just to show off his worldly experiences. Like Honoré de Balzac later, Brillat-Savarin introduced hilarious neologisms, characterizing people's eating habits as "ichthyphagous" or "trufflivorous." Finally, there was a lot of sexual banter and, best of all, fabulous recipes, ranging from omelets to hot chocolate.

Throughout his book, Brillat-Savarin followed the style already established in Alibert's *Physiologie des passions*. However, Brillat-Savarin was more self-conscious, more subversive than his medical predecessor. Brillat-Savarin did not wish to appear authoritative and scientifically objective in his book, as though he was some expert who could always give the last word on the subjects he wrote about (unlike, for instance, Saint-Lambert's dialogues on women). Instead, he wanted to give his readers his perspective, offering a

"take" on reality. His book was thus less about living things than it was about good living, providing a compendium of lusty appetites and pleasures. His physiology recounted a jumbled and fragmented life, a sentimental education dressed and seasoned with medical lingo and wit. In Brillat-Savarin's words: "I sometimes … tend to turn garrulous when I have a tale to tell. But … is it my fault I am like Ulysses, who had seen the cities and ways of life of so many peoples?"[56]

And this brings us to a final, important point about the *Physiologie du goût*. Brillat-Savarin never accepted medical claims about specialized knowledge and privileged authority at face value. Certainly, he praised individual doctors and their scientific accomplishments. But he also felt that doctors were sometimes callous and severe with their patients. There were great doctors like Bichat and Richerand, that was true, but on the whole, the larger group needed to work on their way of doing business. Occasionally, he contrasted medical diagnoses with his observational and analytical skills. In this manner, Brillat-Savarin drew upon medical knowledge in a critical and subversive manner, and he avoided using it as a means of aggrandizing his role as food critic and gourmand, appealing to scientific prestige to cloak his claims to knowledge and authority. Like everything else, Brillat-Savarin was enthusiastic in his passions but discriminating in his taste. When in doubt about the menu, he ordered à la carte. And medical knowledge, for him, was no different.

Honoré de Balzac gave the physiological genre its most distinctive stamp and moved it in a more analytic direction. Balzac wrote two physiologies, the first titled *Physiologie du mariage* (1830) and the second *Physiologie des emplois* (1841), the latter which parodied the bureaucratic types who peopled the government of the July monarchy. Though literary critics rarely rank either book among Balzac's "great works," his *Physiologie du mariage*, which he wrote and rewrote three times in 1820, 1826, and 1829, does prefigure his mature style and literary approach, particularly in how he used naturalistic detail to create a more objective realism.

The *Physiologie du mariage* fits into Balzac's formative phase between 1828 and 1833. During this time, Balzac explored medical themes and questions in his books, notably in the *La Peau de chagrin* and *Le Médecin de campagne*, both of which he published in 1833, and Moïse Le Yaouanc has shown the depth of his medical correspondence and connections with leading medical figures ranging from the pharmacist L.-N. Vauquelin to J.-E.-D. Esquirol.[57] Similarly, the *Physiologie du mariage* shows Balzac establishing critical medical ideas that figured in his later works, notably his fascination with the will, sensation, and the so-called character type.

Nor did Balzac conceal his medical and literary influences in the making of his physiological text. In 1838, there appeared a joint re-edition of Balzac's *Physiologie du mariage* and Brillat-Savarin's original book, with an introduction by none other than Balzac himself. In these pages, Balzac further announced that his study of marriage formed the second installment of a tetralogy on modern morals and manners, a multivolume project that he called *Études analytiques*. But in three years he had scrapped the whole idea in favor of his "human comedy."[58]

Whereas Alibert and Balzac had treated one or more of the senses, Balzac focused

upon the morals and manners of the leisured classes. He wanted to guide his readers—specifically husbands or any other male reader—through the labyrinth of marital relations. He promised to give them an objective and true (or "true-seeming") account of modern marriage, one that could help the husband preserve his property, reputation, and peace of mind.[59] Balzac was also, as Patricia Mainardi reminds, undermining an important idea advocated by the Restoration government, namely, "that it represented a chastened and sanitized monarchy and aristocracy that had no relation to the former profligacy of the upper classes, a profligacy that been accused of precipitating the 1789 Revolution."[60] As seen above, Julien-Joseph Virey had advanced this charge in his natural history of women; Balzac himself returned to this point, but he now suggested that this profligacy was far more widespread in the literate and leisured classes of French society.

According to Balzac, marriage constituted both a natural and a social state. By this, he meant that it was the institution for governing human sexuality and reproduction, both of which preserved the species, but he also observed that it was culturally diverse, always changing across time and place. One could meliorate or degrade marriage either by cultivating or neglecting it, much as Brillat-Savarin had said about the faculty of taste. At the same time, Balzac also cautioned that marriage was a state that was, in many instances, contrary to nature—and in the medical meaning of that term, as something that caused sickness, death, and decay. As Balzac saw it, the fundamental problem of marriage was that two individual wills could never become one, and he added that social institutions and conventions could rarely contain human instinct and desire: our nature subverted the social order of things. And since human nature was what it was, Balzac's physiology took marriage as a state of war, a state similar to the one encountered in the Marquis de Sade's *Philosophie dans le boudoir*. In Balzac's eyes, he had to teach husbands how to avoid what he called "the Minotaur": that is, having one's estate and reputation devoured by a "million hungry bachelors."[61]

To instruct his readers, Balzac followed the physiological style and structure established by Alibert and Brillat-Savarin and used a digressive form of narration, rejecting the former's Stoic spiritualism in favor of the latter's Epicurean skepticism. Throughout, he broke up his story into separate meditations, aphorisms, and anecdotes. Balzac explicitly followed Lawrence Sterne's *Tristam Shandy*—a book which he took as a model, calling it "one of the most famous masterpieces of the human mind"[62]—and at times he seemed less to be writing a book than he was writing a book about writing a book. Paraphrasing Sterne, Balzac declared that his physiology "serve[d] as a description of human thought, and doubtless explain[s] the work itself"—though surely he had long familiarized himself with the kinds of countercultural writings found with physiognomies and animal magnetism.[63]

Physiological science thus constituted both a model and a muse. To illustrate its generational powers, Balzac drew upon one of the great avatars of the Enlightenment life sciences: the polyp. According to him, the creative imagination grew, developed, and reproduced itself like an endlessly regenerating hydra in a jar of water. His physiology of marriage had generated itself in his own mind in this same manner. In his words:

Thus the first root grew and became in turn the starting point of many offshoots

> … Like a polyp, it was bred out of itself. The impressions of my youth, the observations I was enabled to make … seemed endowed with real life, ready to traverse those imaginary lands where the soul … let[s] her wayward offspring wander.[64]

Crucially, doctors not only offered creative techniques to writers, inspiring them with their words and ideas, but that they substantiated these intellectual qualities in how they wrote and spoke in their daily lives. Their professional vocation shaped how they went about doing things and how they approached language itself. In high society, said Balzac, doctors maintained a polite and conversational tone, something essential for good writers, artists, and philosophers. Allowing their ideas to form and develop organically, doctors forged more natural-seeming chains of association in their intellectual exchanges. More humbling yet—from the artistic perspective—doctors understood how to converse more generally "on politics, on the fashions, the theatre; they tell anecdotes, and they write books better than literary men themselves."[65] In many ways, the doctor could deliver the ideal table talk so lionized by Brillat-Savarin. No doubt, in these passages, Balzac was indirectly praising Alibert, but he could have had in mind the larger tradition of physiological medicine.

In his literary approach, Balzac integrated medical knowledge more systematically than Brillat-Savarin or even Alibert. Balzac was already exploring what would become a central idea in his later *Comédie humaine*: namely, the idea of the "type." He used the type as a taxonomic principle to group and analyze the personalities that seemed to appear, more and more, in modern social life—above all among the urban bourgeoisie. Balzac wanted his new category of the type to replace earlier literary models that had personified specific characteristics (such as jealousy, piety, anger, sincerity, and so on). Jean de La Bruyère had first developed this technique as a literary strategy and elements of this approach even persisted in Alibert's sketches of emotional types. By contrast, as Peter Demetz has argued, Balzac approached character types as social and biological abstractions, identifying "common traits" particular to "individuals" of a specific "group" or "class." In this regard, Balzac endeavored to develop an analytic language that captured and addressed the values and habits of the new sociopolitical strata that were emerging from the France's revolutions in government and industry.[66]

Given Balzac's taxonomic methods, historians and literary critics have often underscored Balzac's use of physiognomy, phrenology, and comparative anatomy in constructing his particular model of the literary type, especially his use of the transcendental anatomy associated with Félix Vicq d'Azyr and Étienne Geoffroy Saint-Hilaire. In this process, however, Balzac appropriated physiological science as well, and this approach emerges in his *Physiologie du mariage*. Here, he borrowed from the vitalist framework established by physiological medicine, and he adapted the statistical methods pioneered by social hygienists such as Louis-René Villermé and L.-F. Benoîston de Châteauneuf (the latter whom Balzac cited directly).[67]

Above all, Balzac assumed the clinical maxim that physiology allowed doctors to diagnose and treat diseases accurately. For him, the writer must first establish proper genera and subgenera and then work within these fixed categories. Delineating his

book's subject matter in the opening chapters, he identified the kinds of leisured men and women he wanted to study and put their virtues and vices in a socio-statistical setting. Within this group—aristocrats, the rich, and the bourgeoisie—marriage was both a "war" and a "duel"[68]—his words echoed Pierre Choderlos de Laclos—but he also described it, in medical terms, as a "form of disease"[69]—once "mild," then made deadly by adultery. Balzac was clear in blaming the pathogenesis of this particular blight. It was men themselves who caused this disease, simply because they treated their wives so poorly. In blunt terms, he claimed that marriage had whetted women's sexual appetites, but then husbands seemed too clueless or boorish to feed it properly. So emotional resentment and physical frustration set in and soon the Minotaur appeared.

At this point, Balzac began to elaborate his physiological literary technique in full. "Physiology" gave him a narrative and structural device to describe and diagnose the onset of marital pathology, shaping his mass of anecdotes, aphorisms, reports, and meditations. It allowed him both to analyze social and biological phenomena as well as to tell a coherent story about them. This narration unfolded just like any other disease case history, replete with its symptoms, signs, crises, and resolution. And as the disease narrative deepened, Balzac's satire and irony became more brutal.

In Balzac's view, the conjugal malady manifested its "first symptoms" in the period following the marriage ceremony.[70] An attentive husband should survey the marital situation carefully, with a studied clinical eye, because the disease symptoms varied widely and they were often concealed from him by his wife. To gain sufficient insight, Balzac urged his male readers to study Lavater's physiognomy and then to memorize every gesture and "look" their wives gave to detect when anything began to change in their behavior.[71] Yet, he also said that wives evinced some physical and behavior signs that didn't need any special medical skills to diagnose. In particular, he told husbands to be alert to things such as when their wives regularly started going to Mass (above all Vespers), when the couple had territorial disputes about sharing household space, and when one began experiencing particular kinds of domestic quarrels. Watch out, said Balzac: the disease was setting in.

These early symptoms heralded a major pathological crisis, one that Balzac characterized as a "catastrophe" or "revolution." Here, he self-consciously appropriated Georges Cuvier's zoological terms, which he used to describe radical geological change and species extinction. But for Balzac, these biomedical words were not just evocative or metaphoric. Rather, they distilled his basic physiological approach. In his eyes, marriage had become, quite simply, "contra-natural." Hence he used the clinical term "crisis" [*crise*].[72] For doctors, a crisis was the moment in a sickness when the underlying disease symptoms fully expressed themselves. It was also a crucial term in mesmerist therapeutics—a movement that had attracted Balzac and had found expression in books such as *Ursule Mirouët*—in which a patient came to dramatic convulsive movement and either recovered or slipped into a worsening state.[73] At this moment, the sick body could radically change its course in ways that no one could foresee. And here, marriage entered into its most dangerous state.

To surmount the disease crisis, marriage needed a stiff medical regimen or what Balzac called "policy": that is, a coherent approach and technique for managing marital

infidelity. Armed with a good policy, husbands could use medical knowledge and skill to distract, exhaust, and control their wives.[74] Balzac's use of the term "manage" is in itself revealing, because it suggested resignation, as if acknowledging an inability to change the reality of marital relationships. He said that in marriage, as in politics and military diplomacy, husbands should negotiate as nimbly as Charles-Maurice de Talleyrand in Vienna but rule as firmly as the royalists did in Spain: in the latter case, controlling their unfortunate subjects by making them ignorant, superstitious, and bigoted. In this regard, husbands could try a number of things to keep their wives intellectually vapid and clueless about their true situation in society. They could, for example, deny their wives an education and prevent them from reading books—especially sentimental novels.

More innocuously, husbands could try to exhaust their wives so to keep them out of the arms of potential lovers. Drawing upon Xavier Bichat, who had claimed that organisms possessed limited amounts of energy, Balzac said that husbands should make sure that their wives wasted all their own away. Husbands should encourage their wives to immerse themselves in the world of household luxuries or engage in fashionable activities such as ballroom dancing. Or they could have them read Jean-Jacques Rousseau's *Emile* in the hope that they might become obsessive about breastfeeding their children. When all else failed, said Balzac, the husband could follow Broussais's notorious therapeutic practice and slap leeches all over their wives, thereby bleeding them into catatonic submission.[75]

Balzac stressed that effective medical policy did more than dominate the wife's body. Rather, it sought to control her entire social and physical environment, just as a physiologist, in practicing vivisection, endeavored to control all elements of the experiment. Husbands ought to turn their homes into a "sort of observatory,"[76] policing all aspects relating to interior design and architecture, marital sleeping arrangements, and even the proper choice of a bed. In all this, medical policy constituted a form of allopathic regimen—curing by opposite—one that was designed to contain a pathological inflammation.

At this point, Balzac's physiology shifted from misogynist fantasy and became full-blown satire. This form of medical policy, however necessary the jealous husband might think it was, provoked "a kind of horror" in proper society and ultimately it exploded in a marital civil war.[77] The marital malady now evinced its "final symptoms," as the wife began experiencing migraines, nervous disorders, and total disregard for personal modesty. In all this, women learned to use their bodies, not to incite desire, but rather to repulse men. And here medical knowledge, which had hitherto guided husbands in controlling the conjugal malady, now turned into an unreliable ally (much like Balzac's unreliable narrator himself). This is because doctors, knowing who demanded their services, conspired with their female patients, inventing all sorts of diseases and cures—allowing women to evade their husbands' obsessive controlling desires and thereby undermining or combatting patriarchal authority itself.[78]

At this catastrophic moment, Balzac recommended something unexpected to his male readers. Husbands could surrender their pride and hubris and abandon their fantasy of total medical control—as he had just outlined it—and instead let nature take its healing course. With these words, Balzac seemed to echo Brillat-Savarin's Epicurean generosity.

Male honor and pride mattered much less than good humor and peace of mind. It was only natural for women to express their libidinal urges outside the formal structure of marriage.

For this reason alone, husbands should refuse to sacrifice their energy and strength in trying to control something that was going to happen anyway. So it was better that they accept the reality of marital infidelity and should thus acquiesce to the Minotaur and all that it occasioned—even a lover's illegitimate children. Balzac concluded: "We may take it for granted that a woman has not done her duty by physiology—or by the Devil—if she has only made three men happy."[79]

One can readily dismiss Balzac for his misogyny and smug cynicism toward marriage and the family. However, it is important to note that his satire was also coy and subversive in the same way that Brillat-Savarin had been. Balzac toyed with his male readers' prejudices toward women, marriage, and sexuality—and then he systemically undermined all of them. His book questioned the economic nature of upper-class marriage and all the honor codes and hypocrisy that maintained it. In this regard, he explored the "free love" arguments in which marriage should be a natural state between two people united in mutual love. These ideas about companionate marriage had already appeared in works of sentimental fiction and had found more pointed political expression in the Utopian socialism associated with the Saint-Simonians, among others.[80] Developing this line of thought, Balzac insisted that women were autonomous and libidinous beings who were subjected to bigoted and irrational social conventions, all designed and upheld by jealous men. At the same time, he insisted that sexual continence was unhealthy and demoralizing for both men and women—a point also raised by Pierre Cabanis and J.-L. Moreau de la Sarthe—and he rejected traditional religious ideals of chastity and the view that sex constituted a purely procreative act (something which doctors such as J.-A. Millot and L.-J.-M. Robert had also explored). Above all, he denounced writers whom he characterized as "straight-backed pedants in fact, purists in morals."[81] In his eyes, they denied the reality of all instinct and desire and shackled people with values and behavior that were out of touch with the actual world.

As an antidote to such pedantry, Balzac returned to Brillat-Savarin and counseled what he considered to be the art of good living. In Epicurean fashion, readers could take their innate drives and emotions and turn them into refined and pleasurable activities. And here Balzac evoked François Rabelais and urged his readers to accept human nature for what it was and not "to choke off all that is generous and spontaneous in human feeling." Pleasure itself, he promised, still "awaits its physiologist."[82]

In 1830, in the weeks following the July Revolution—which overthrew the Bourbon regime and installed a constitutional monarchy under Louis-Philippe—there appeared a curious book titled *Physiologie de la liberté*, penned by the physician and popular writer J. Morel de Rubempré (it would also reappear, that same year, in slightly changed format under the title of *De la liberté*).[83] Nor was Morel de Rubempré the only physician who was now trying to adopt the physiological approach to nonmedical subjects: Louis-Victor Bénech, four years previously, had written a physiological treatise on the analysis of handwriting and what it revealed about character.[84]

Tailored to the political moment, Morel de Rubempré's *Physiologie de la liberté* was one of hundreds upon hundreds of broadsides, pamphlets, and books that rolled off the presses following the overthrow of the Bourbons and the granting of new individual liberties, including (for a short while) the freedom of the press. Medical practitioners—and students, too—had participated in the "three glorious days." Civic-minded doctors had joined the barricades in the Latin quarter—a sacrifice for which they were later decorated—and the Parisian faculty later paraded by Louis-Philippe to show solidarity with his new government.[85] One physician, the popularizer Jean-Alexis Belliol, even published a poem to honor the Orléans monarchy, exhorting the new king to adopt the name "Philippe-le-Populaire." He rhapsodized:

> Rejoice homeland, O glorious mother,
> Cry no more for your sons, martyrs for liberty!
> Their glory is in heaven! Its shining halo
> Comes down upon us like a sign,
> Radiant with immortality![86]

The author of *Physiologie de la libertéu* was no less a curiosity than the book itself. Morel de Rubempré had pieced together for himself a checkered career as physician and popularizer, and he was part of a husband and wife duo who made their living by publishing books on many saucy and forbidden medical topics, all geared toward the cheaper and lowbrow side of the reading market.

J. Morel de Rubempré started his career by publishing garden-variety medical popularizations, often borrowed from known writers such as Samuel-Auguste Tissot and C.-A. Hufeland, but he soon branched out into more lucrative subject matters.[87] Taking a page from the notorious quack and remedy-hawker Boyveau-Laffecteur, who had marketed his special syphilis cures, Morel had written on all sorts of self-treatments for venereal diseases in books such as *Le Médecin de Vénus, ou l'art de se guérir soi-même de toutes les espèces de syphilis*, which he first published in 1825. Soon after, he repackaged J.-A. Millot's books on sex and procreating boys in *Code de génération universelle* (1829) and *Les Secrets de la génération* (1830) and then wrote about masturbation, impotence, and penile dysfunction in *La Génésie ou nouveau traité complet des causes et effets de l'impuissance* (n.d.) and *Le Conservateur et le réconfortateur des facultés génitales* (1836). As if this was not titillating enough, he later mimicked Nicolas-Edme Restif de la Bretonne and the Marquis de Sade and published on the sex trade in *La Pornologie ou histoire naturelle, universelle et complète de la débauche et de la prostitution et autres dépravations* (n.d.) as well as *Les jeunes filles folles ou égarées* (1843). Elsewhere, Morel cashed in on the physiognomic rage—cheaply printing Lavater so to compete with J.-L. Moreau de la Sarthe's upscale edition—and his wife, who translated German philosophy and sentimental novels, published her own book that surveyed all the subversive medical genres we've encountered: animal magnetism, somnambulism, phrenology, and physiognomy. Many of these books underwent multiple printings and editions throughout the 1830s and 1840s. In some ways, the entire world of medical undercurrents coalesced in the husband-and-wife publishing career of the Morel de Rubemprés (fig. 8.3).

J. Morel de Rubempré's *Physiologie de la liberté* was a physiology in the double sense of

the term. On one level, he wanted to show that human liberty and freedom had a natural or physiological basis to it: freedom, he argued, inhered in humanity's biological makeup. On another level, he used the literary approach of physiology—as developed by Alibert, Brillat-Savarin, and Balzac—to provide a "decomposition" of human liberty and to give an objective and analytic account of its qualities. Liberty, it turns out, constituted its own object that physicians could study with the same exactitude and rigor as any other physical or mental phenomenon.

Praising Pierre Cabanis and his fellow Idéologue philosophers, Morel de Rubempré situated himself in the established tradition of the science of man and proposed to study the human individual as he or she left "the hands of nature."[88] He began his analysis by examining humankind's physical organization and how physical faculties and intelligence developed over time—both for the individual and for the collective. This physiological understanding revealed humanity's needs and capabilities: what men and women needed and understood about their world; how they made laws and governed themselves; what they thought about justice, morality, and religion; and what diseases afflicted them in mind and body and how people could avoid or cure them. Most significantly, Morel de Rubempré wanted to explain "[man's] perfectibility and the surest and most infallible methods to perfect his physical and moral being, to correct his morals and manners, to ameliorate his conduct" as well as "public opinion, patriotism, and the horror of despotism."[89] In short, liberty was a natural attribute in the human species and something to which it aspired by instinct. Any other political state, he said, was contra-natural—to use the medical jargon of the day—and it should be stamped out like any other disease.

FIG. 8.3. Portrait of J. Morel de Rubempré (s.d.). Code: anmpx22x238. Bibliothèque Interuniversitaire de Santé, Paris. Morel here claimed his intellectual forefathers, both modern an ancient.

To discover the keys to human happiness, said Morel de Rubempré, one must study human nature. Only through this means could humanity understand itself, grasping its instincts and needs, and thereby craft the best forms of government, laws, and customs to satisfy this primordial nature. And to understand human nature one must begin with humankind's physical organization, that is, its physiology, for all human activities, both individual and collective, originated from material biological processes working within the body itself. Neither religion nor metaphysics could give people the proper tools to understand themselves and their surrounding world. Morel de Rubempré, therefore, repudiated the more conservative and spiritualist ideas that characterized physicians such as Frédéric Bérard and J.-L. Alibert. These ideas, as Morel de Rubempré made clear, buttressed the conservative political order and shackled humanity to the chains of despotism and superstition. This belief was "only proper to retard the progress of enlightenment, the emancipation of the human spirit, and the happy destinies of nations."[90]

With these words, Morel de Rubempré—who might otherwise be characterized as a pulp writer and quasi-pornographer by trade—situated himself in the tradition of 1789 and espoused the principles of individual liberty, constitutional government, and secular authority. He rejected out of hand the conservative and reactionary world of Restoration society, above all its philosophical self-justifications: the scholastic dogmas of Louis-Gabriel-Ambroise de Bonald, the medieval spiritualism of François-René de Châteaubriand, and the ultramontanism of Joseph de Maistre. He also, in equal measure, rejected the moderate spiritualist philosophy associated with Eclectics such as F.-P. Maine de Biran and Victor Cousin. Rather, Morel de Rubempré returned to the previous century and championed the empirical skepticism and materialist philosophy associated with the radical Enlightenment and its most recent heirs, notably Francis Bacon, John Locke, Claude-Adrien Helvétius, Peter Camper, Pierre Cabanis, Franz Joseph Gall, and, especially, F.-J.-V. Broussais.[91]

Morel de Rubempré insisted that the individual body gave observers all the knowledge they needed to derive proper laws for organizing society and government. This was because the body had evolved in a way that allowed humanity to best fulfill its basic needs: namely, self-preservation and reproduction of the species. Each need had its own biological faculties, and these faculties formed the basis of all individual rights. "We must understand by man's faculties," he wrote, "all the means of action that nature put in his power for the satisfaction of the different needs to which he finds himself submitted."[92] He argued:

> Mankind's faculties having as its goal the satisfaction of a natural need, his conservation, and his well-being, there is no doubt that each has the right to make them work together in order to procure his happiness. *Sentiment, need, faculty, and right are four things as sacred and as inviolable as they are inseparable from one another* [*sic*].[93]

Humankind created society with the express purpose of safeguarding these natural rights. Sociability extended from humanity's biological needs, appearing as a faculty unto

itself; humankind was, by its nature, predisposed to live together in society. *L'homme collectif* possessed, he insisted, the same rights as *l'homme isolé*: just as individuals had the right to do what they needed to satisfy their needs and protect their freedoms, so too did society possess the same rights to do what it needed to secure its needs. Individual and collective rights proved mutually reinforcing, as society possessed the same needs and rights as the citizen him or herself. Following Cesare Beccaria and C.-A. Helvétius, Morel de Rubempré espoused a utilitarian or hedonistic understanding of individual and society. Humans, he said, endeavored to increase the sum of their pleasures and avoid pain or displeasure, and so society must provide the greatest happiness to the greatest number; people entered the social contract so to satisfy their needs and escape the dangers of nature.[94] People craved their rights, in a carnal sense, because they fulfilled physical needs and preserved their faculties. No person, no government, could deny them.

Nonetheless, rights also required duties and society needed laws and institutions to uphold them. Morel de Rubempré used social contract theory and physiological medicine to critique traditional forms of authority and to argue against patriarchal authority—and in a manner far more direct and subversive than Balzac had done his *Physiologie du mariage*. According to Morel de Rubempré, human communities first entrusted fathers with political and moral authority so that they might guarantee care, safety, justice, and moral conduct for all their members. However, as society developed and progressed, becoming more complex and interdependent, government emerged as an institution to adjudicate social claims and conflicts. Government, argued Morel de Rubempré, supplemented traditional patriarchal authority—especially its arbitrary and capricious nature—by securing people's rights and duties through positive laws and representative institutions. Through these means, reason replaced violence as a means of resolving conflicts and compelling good behavior or personal loyalty. What now prevailed was not the rule of fathers but rather self-government and the rule of law.

When Morel de Rubempré repudiated patriarchy in the domestic realm, he also did so on the political level, above all with absolutist and monarchist authority. This patriarchal quality, he believed, epitomized the Bourbon government and rendered it both obsolete and illegitimate. In its place, he extolled republican or representative forms of government, which he thought should be enshrined in the nation-state and recognize "the people" as the sovereign authority. He wrote:

> Homeland [*la patrie*]—which the name alone causes the heart of every generous and honest soul to palpitate—is only a brief expression by which one expresses neither territory nor native land, neither kingdom nor empire, but rather a more or less numerous society of living men who are existing under the banner of liberty and freedom [*régime de la liberté*].[95]

And such a society, founded upon liberty and freedom, inspired men and women to love it as dearly as they loved their own lives, for it was the entity that allowed them to satisfy their needs and protect their natural rights. When persons chose despotism or tyranny over freedom and liberty, they betrayed their human nature. They thought and behaved in a pathological manner, suffering from "a monstrous organization, of the last

degree of physical and moral degradation."[96]

Morel de Rubempré concluded his physiological study with a sweeping critique of criminal law and punishment in European society. Nothing, he believed, better symbolized despotic government than in how it defined crime and meted out punishment. Making a libertarian argument, Morel de Rubempré charged government itself, with its unjust laws and unequal privileges, with instigating much deviance and law-breaking within society. On one level, people became criminals to satisfy needs that the social system denied them, a sentimental point most famously demonstrated by Jean Valjean in Victor Hugo's *Les Misérables* (1862). On another level, however, sometimes people became criminals just because they could not control themselves; they were biologically predisposed to deviant behavior and behaved in ways that were beyond rational command. Drawing upon the neurophysiological research pioneered by Gall and Spurzheim, Morel de Rubempré argued that the brain and nervous system controlled their mental states and activities. In such cases, material lesions in the cerebral or neural tissue provoked "the most bizarre mental diseases," deviant behavior, and all sorts of "moral perversion."[97]

For these reasons, criminals, much like the mentally insane, needed neither judges nor jailers, but rather qualified and humane medical care. One should never give up hope that criminals might be cured and rehabilitated; nor should people indulge in sadistic pleasure in punishing wrong-doers. Rather, one should correct deviant behavior with a caring heart and aspire to heal these sick people and reintegrate them into the body politic. Given these biological realities, he called upon the "noble legislative assembly" to recognize the "grandeur of current physiological knowledge" and seek to redeem those people who had fallen into criminal behavior on account of "independent and accidental circumstances beyond their control."[98]

In all this, Morel de Rubempré challenged one particular punishment: the death penalty itself. Beyond the fact that the death penalty took the lives of people whom physicians could treat and cure, the practice of putting people to death corrupted private morals and public virtue. The death penalty, with its violence and public display, turned individuals who were "naturally good, just, and generous" into "inhuman, immoral, and barbaric" people. Public executions, above all, destroyed individual moral conscience by degrading the spectator's sensibility and capacity to empathize with others. For Morel de Rubempré, corporeal punishment—which encompassed all forms of torture and execution—helped perpetuate tyrannical or despotic regimes, allowing governments to corrupt the public's moral virtue and habituated them to the regime's brutal and corrupt nature.[99]

Through all this, Morel de Rubempré affirmed the Enlightenment belief in human progress and improvement, drawing more radical conclusions than Brillat-Savarin or Balzac from Epicurean philosophy. Like Condorcet and Cabanis, Morel de Rubempré insisted that health care and public instruction could regenerate society, alleviate material needs, and deepen humanity's faculties and moral nature. But all of this rested upon individual liberty and an inspired practice of citizenship. He concluded, "Of all the means capable of perfecting mankind, there is nothing more powerful than emulation, love of esteem, and public consideration."[100]

The physiological genre pioneered by Alibert, Brillat-Savarin, Balzac, and Morel de Rubempré emerged from conventions established in physiological medicine in the early 1800s. These biomedical conventions provided writers with ideas about the nature of living beings as well as the critical—and stylistic—methods needed to go about studying them. In short, they allowed writers to provide a "serious treatment of everyday reality," as Erich Auerbach characterized the process of literary mimesis.[101] Significantly, the writers explored in this chapter saw human experience as embedded in internal biology and physical environment. Hence, they drew upon physiological medicine because it seemed to capture, more so than any other natural science, the individuality, complexity, and even irrationality of the human condition.

At the same time, however, these writers also approached medical knowledge and authority in critical, if not skeptical, terms. For instance, the physician Alibert drew upon other moral discourses, both theological and philosophical, to challenge medical materialism and medical claims to metaphysical certainty, while Brillat-Savarin and Balzac critiqued specific medical figures and values, and they themselves doubted medical claims and therapeutic practices. Morel de Rubempré took physiological theories and literary approaches to argue for a new liberal-constitutional regime that many reformers hoped would emerge after the July Revolution; he also called for a return to the materialist-republican sympathies that had characterized the Idéologues and like-minded physicians during the time of the First Republic. He saw official medicine through critical eyes, skeptical of the conservative establishment to which it was sometimes linked.

The physiological genre thus exemplifies the ever-shifting dialogue between medicine and intellectual culture in the postrevolutionary period. Both medical and lay writers could appropriate biomedical knowledge for their professional purposes and social agendas, and sometimes in ways that transfigured the original claims of medical power and authority. It had become, as we had first seen with the Marquis de Sade, a powerful and compelling means of thinking about the rapidly changing world of revolutionary France, offering a generalized language that allowed people, irrespective of perspective or social or political background, to understand dramatic changes and assert their opinions and stake out their own territories. However, medicine also offered a way, through the medium of the medical writing and books, to share values with like-minded individuals and to play with the formal conventions of scientific writing and objectivity—thereby delighting and challenging readers with opinions and experiences that far exceeded their own. This approach defines the genre of physiological literature, which directly addressed the frenzied and fragmented world of postrevolutionary France.

Epilogue

Medicine, Writing, and Subcultures after the Revolution

In the decades following the French Revolution, the new medicine originating from the Paris schools, hospitals, and asylums captured the imagination of intellectuals and lay readers alike. This book has endeavored to reconstruct something of this dynamic exchange between medicine and the broader cultural world of the educated and leisured classes. There was a mad creative vitality about the time. Readers and spectators absorbed the new physiological research being done by Xavier Bichat and his cohort, the physical anthropology developed by Pierre Cabanis and his Idéologue colleagues at the Institut National, the moral medicine pioneered by Philippe Pinel and his pupils at the Bicêtre and Salpêtrière hospitals, the comparative anatomy established by Félix Vicq d'Azyr and Georges Cuvier, and the public displays associated with galvanism and phrenology. Contemporaries discussed these innovations, not just in amphitheaters, wards, and morgues (which attracted lay enthusiasts and spectators, as well), but also in popular journals and magazines, literary and philosophical works, art academies, and salons, all which documented the intense intellectual energy and real sense of discovery of the moment. Readers and spectators understood that they were witnessing a time of rapid scientific advance, one in which researchers were uncovering the laws of health, disease, and life itself. Though the new medicine might be short on cures, it promised major breakthroughs in the future. Medicine had come into its own as a bona fide science.

However, the reading public followed the new medicine for reasons other than the thrill of scientific discovery. Something else was going on. It seems as though the new medicine was speaking to a specific political and cultural moment in French history. For

these biomedical changes unfolded against the forces of revolution and war—forces that had overturned the old order of things. "The most striking aspect of the French Revolution is this overwhelming force which turns aside all obstacles," fumed the arch-conservative Joseph de Maistre. "Its current carries away like a straw everything human power has opposed to it."[1] The new medicine, I have argued, gave contemporaries the cultural tools to understand "this overwhelming force" and allow them to navigate better the currents of an ever-shifting cultural landscape.

Biomedical science attracted contemporaries for several reasons. First, it promised to explain human nature and society by taking the individual self as a microcosm for the larger polity itself, an assumption that was enshrined, for example, in Cabanis's "science of man." Further, it offered new insight into the mind–body problem and could thus illuminate the origins of human ideas, attitudes, and behavior. Lastly, biomedical science promised ways for contemporaries to diagnose political and social challenges and, through therapeutic treatment or hygienic habits, to control the course of human events. In short, it offered people appealing ways of thinking about self and society in a time and place where traditional meaning and authority had collapsed. No single value system commanded general assent. To use a phrase from philosopher Charles Taylor, no "inescapable framework" had emerged to explain individual agency and autonomy.[2]

Biomedical science offered a response to this fragmented framework; it gave contemporaries a new way of talking about the human condition. That said, it would be imprecise to say that medicine constituted a "hegemonic" discourse or problematic, a reflection of some shared consciousness among doctors and social elites about nature and society. Quite the contrary, these medical discourses were fragmented and contested in their own right. The same epistemological crisis that gripped broader society failed to spare physicians and surgeons themselves or the ideas and values that they sought to share. Medical ideas and language may have given contemporaries new and appealing ways to talk about human nature and society, but these discourses did not ensure that people always agreed with one another or how they interpreted the world. For all that medicine ostensibly provided, as a rational and objective science, literate people approached it in different and unpredictable ways, especially when using it as a tool for diagnosing the world around them. It was less ideological or hegemonic than dialogic and open-ended in scope and process.

These medical dialogues unfolded on several levels. To be sure, some medical ideas about self and society were authoritarian or conservative. Examples abound with the "natural history of women" or with J.-L. Alibert's physiology of the passions. Yet this was but one facet of this intellectual exchange. Many writers also used medical ideas and language in corrosive or radical ways, as when they discussed politics, social elites, and sex and gender relations; at other times, they treated the physician's persona and authority with skepticism or outright irreverence. These corrosive qualities appear in the Marquis de Sade's pornographic fiction, the sex advice proffered by L.-J.-M. Robert and J.-A. Millot, the satirical views of J.-F. de Saint-Lambert and Honoré de Balzac, the liberal-democratic ideals espoused by J. Morel de Rubempré, the different ways that editors packaged Johann Kaspar Lavater's physiognomic system, or in how doctors and lay observers debated somnambulism, catalepsy, and animal magnetism. In these cases,

"facts" and "interpretation" were anybody's guess: not just for the writers themselves, but for their readers, as well.

This impulse toward fragmentation and contestation emerges, most vividly, in the proliferation of medical genres and subcultures, all which reveal a wide degree of curiosities, obsessions, and professional and ideological agendas. These genres and subgroups reflected deeper struggles in French society. After the Revolution, because of political frustrations, intellectual and cultural life became more atomized, as contemporaries withdrew from the political world and entered more narrow social spheres, seeking the intimacy and like-minded opportunities afforded by small groups. Not surprisingly, these smaller communities also had a tendency to reify people's existing ideas and values, validating how they went about doing things and looking at the world. There was an element of escapism at work, as well. One sees this relation at play in aesthetic groups such as the Barbus; the flowering of spiritualist or occultist sects such as the Martinists, the Swedenborgians, and the Theosophists; and the political secret societies that emerged under the Directorial republic, of which the most famous was F.-N. Babeuf's "Conspiracy of Equals." In medical circles, as we've seen, this trend dramatically emerged in J.-G. Salvage's morgue experiments or in the coteries surrounding animal magnetism and catalepsy in the early 1800s.

With these developments, France was not entirely unique. A similar trend within science and medicine appears elsewhere in the European setting. Scientific and medical practitioners began congregating in smaller, more intimate groups, which were characterized by collective attachment to particular political, social, and intellectual ideals. In Italy, for instance, scientific figures embraced smaller professional associations because they lacked the larger national identity or public place to voice their political hopes and dreams.[3] In Germany, as Peter Hanns Reill has shown, scientific and philosophical figures indulged in fantastic philosophical speculation, above all with the Romantic *Naturphilosophen*, as a kind of intellectual compensation for the lack of real-world experience and status.[4] In England, medical professionals eschewed Tory conservatism and religious conformity and were drawn to both radical politics as well as materialist philosophy, above all with the "transcendental morphology" associated with evolutionary transformism (and whose intellectual home was widely seen as France).[5]

In France, this heterodox and open-ended quality appears, most strikingly, in the style and form of medical writing, above all in the structure of the book, as an artifact in itself. Writers and editors used diverse forms, structures, traditions, and techniques when composing their works and trying to reach desired readers and constituencies. Form and style constituted important elements of medical writing, for both helped authors establish points of view and engage (or shape) reader sensibilities. While the conventions that characterize later "objective" medical prose were emerging—whether in form of the nosology, the clinical study, anatomical description, the physiological experiment, the medical topography, and the formal textbook style—these conventions circulated alongside other imaginative medical styles. These styles also carried intellectual respectability, and contemporaries viewed them as legitimate forms of medico-scientific exchange—a point that Sabine Arnaud has also demonstrated with hysteria and medical writing in France and England.[6]

This book has documented the variety of stylistic techniques that existed in the postrevolutionary period: epistolary exchanges (which mirrored novelistic conventions, especially those refined by Samuel Richardson and Jean-Jacques Rousseau), imaginative dialogues (as borrowed from conventions pioneered by Denis Diderot in *Le Rêve de d'Alembert* and *Jacques le fataliste*), the insertion of pamphlets and short stories (starting with Sade's *Philosophe dans le boudoir*), the didactic and pedagogical deployment of catechism devices (as secularized by Galileo and then expanded in the Enlightenment), extensive quotation or the borrowing or plagiarizing of other sources (including those from competing authors), pictorial illustration as a storytelling device or as sheer ornamentation, the use of the travelogue (as when describing urban interactions), and, last but not least, memoir-writing or other forms of autobiography. These medical books assumed the quality of a collage or as a *bric-à-brac* text: something that was both written and assembled. This style, above all, coalesced in the "physiological" books pioneered by J.-A. Alibert, J.-A. Brillat-Savarin, Honoré de Balzac, and J. Morel de Rubempré.

Furthermore, these books promoted a discontinuous style of reading. Writers and editors assembled their texts in ways that allowed readers to dip in and out of their pages, honing in on the parts that interested them or from which they hoped to extract specific information. Often, these medical books were open-ended in content and format, attaining a quality that I have called "dialogic" in nature. Through these means, writers and editors treated readers as autonomous agents with desires and agendas and opinions of their own; they were less concerned with shaping readers' opinions and values than in engaging with them. Readers, in this regard, were not perceived as passive interlocutors but were instead treated as active and autonomous agents with whom they shared a particular vision of the world.

The relationship among medical writing, readership, and subcultures raises important questions about the physician's status: not just as a persona with scientific authority, as someone who dispenses objective knowledge and experience, but also as a writer engaged in a literary enterprise. It further raises the question of what happened to these forms of medical writing as the nineteenth century rolled on over time. Here, postrevolutionary medical writings cast light on the "physician–writer," a figure who has become part of the general intellectual landscape and who has helped pioneer both literary and philosophical modernism in the European and American settings.[7]

Literary historians have often identified three distinct groups of physician–writers, each with their own professional backgrounds, specific areas of literary focus, and attitudes toward the relationship between medical practice, formation, and writing. On a first level, there have been a notable group of doctors who have established themselves as literary figures outside their home field of medical practice and formation. The best-known individuals are Anton Chekhov, L.-F. Céline, Arthur Schnitzler, Alfred Döblin, and Walker Percy, though literary specialists can point to whole traditions in their respective fields. These writers wrote works outside of their professional medical field and self-consciously embraced their status as an "author" or literary type—as a vocation distinct from that of medicine—though many drew upon their medical formation and experience in their creative works (a point seen, for French literature, with Céline, who started his professional life by writing on the hygienic crusader Ignaz Semmelweis). William Carlos

Williams summarized this formal and stylistic relation between medicine and literature when he declared, "The scientist is very important to the poet, because his language is important to him.… I have been taught to be accurate in my speech."[8]

On another level, prominent physician–writers have used their literary talents to share the complex and technical dimensions of human health and medical practice with larger audiences. Famous twentieth-century examples include Oliver Sacks, Sherwin B. Nuland, Atul Gawande, Robert Cole, and Paul Farmer. In these writings, these doctors use literary styles and conventions that are separate from the technical world of medical research and academic communication: medicine must be rendered, not just interesting on account of its intrinsic subject matter, but also more intelligible and compelling to general readers. For some of these writers, the particularity of their professional experiences mandated that they adopt a more imaginative form of language and write in ways that would be unacceptable within a strict disciplinary or professional context. Oliver Sacks has put it, when reflecting upon his book *Awakenings*, "I was seeing such things as had never, perhaps, been seen before—and which, in all probability, would never be seen again; it was my duty, and my joy, to record and bear witness." Such bearing witness, then, required different structural forms of writing and more imaginative or poetic prose style.[9]

To this panorama of physician–writers, M. Faith McLellan has identified a third type: the medical writer who uses imaginative prose to probe the present limits and potentials of medical science. A classic example remains S. Weir Mitchell's futuristic writings or, in more recent settings, the work of J. G. Ballard (who himself dropped out of medical school) or Walker Percy, who wrote about dystopian settings.[10] One should underscore, in more than passing, the masculine nature of the physician–writer, a quality that reflects how the medical profession long excluded women from practice, as well as the pervasive challenges toward women working as creative writers and artists.

Though physician–writers are noted figures in twentieth-century arts and letters, they also existed in the eighteenth and early nineteenth centuries. For the Enlightenment, scholars have often focused upon Tobias George Smollett, the Scottish physician and satirist, but many other doctors of the time evinced extensive literary and philosophical interests. We've referenced some of them before, of course, but the names bear repeating. There's John Locke himself, who had first trained with Thomas Willis, a pioneer in neurological science; Jean Astruc wrote on female diseases, including hysteria and nymphomania, but is famous for pioneering modern biblical criticism; Friedrich Schiller started as an army doctor but then consecrated his life to the fine arts. Albrecht von Haller revolutionized Enlightenment physiology but also wrote poetry, while the early biologist Charles Bonnet, beset by encroaching blindness, abandoned physiology and natural history and instead wrote philosophy and theology. Samuel-Auguste Tissot marshaled his literary talents to edify the Enlightenment-reading public on health and morality and in the process became one of the most read writers of this period, one who inspired an astonishing amount of general correspondence all across Europe, something akin to reader responses to J.-J. Rousseau himself in the 1760s and 1770s.[11]

Between the 1790s and the 1830s, one finds a similar dynamic with physicians. However, these doctors were not merely engaging in literary pursuits outside their

formal area of training (as had Smollet and Schiller). Nor were they always playing the role of a popularizer, trying to explain medical ideas to laypeople (as did Tissot). Instead, these medical writers, figures such as J.-L. Moreau de la Sarthe, J.-J. Virey, J.-A. Millot, L.-J.-M. Robert, J.-G. Salvage, and J. Morel de Rubempré, worked under different concerns and impulses. These men wrote to consolidate their professional position and acquire status in the broader republic of letters; they craved recognition as intellectual figures, as that status was understood in the early 1800s (the term "intellectual" itself appeared much later, during the Dreyfus Affair of the 1890s).[12] In so doing, they styled themselves as "men of letters" (*écrivans*), learned writers or scientists (*savants*), or as actual *philosophes* in the grand Enlightenment tradition, engaged in public critique and debate.[13]

For these doctors, intellectual status distinguished themselves in the medical marketplace, allowing them to garner more patients and patrons or putting them in line for academic or university posts (and some hoped to eke out additional income to compensate their private practices). Writing, in sum, increased the physicians' professional profile. At the same time, writing gave doctors an outlet to express professional and personal aspirations, including the drive for improvement and *bienfaisance* that motivated many medical professionals of the time—and which Honoré de Balzac captured, in sympathetic ways, in his *Le Médecin de campagne* (1833).[14]

On the other side of the coin, lay writers also engaged medical ideas and language as a way of aggrandizing their intellectual status and to deepen the quality of their literary work. Writers like the Marquis de Sade, J.-A. Brillat-Savarin, and Honoré de Balzac used medical ideas and language in ways that transfigured original intent and meaning—and sometimes challenged medicine's professional authority and epistemological claims to boot. Moreover, these writers often seemed attracted to the medical underworlds of the Paris clinics. It seems that this speculative and unorthodox work, whether philosophical physiology, natural history, physiognomy, or mesmerism, was what intrigued literary and artistic figures, pulling the fashionable world into the orbit of Paris medicine. It attracted them because these underworlds gave important insights into people's inner minds and bodies and what made them tick in the realm of social relations—the stuff of greater aesthetic verisimilitude.

What happened to this rich world of medical genres and subcultures? It was not that medical fads stopped after the 1830s or that medical popularization lost its appeal. Quite the contrary. Starting in the late 1820s, a number of works began sharing biomedical advances, in sophisticated and in-depth manner, with learned and discriminating audiences. These included the *Encyclopédie portative ou résumé universel des sciences, des lettres et des arts* (which published an entire volume on physiology in 1827), *Bibliotheque d'instruction populaire: Maître Pierre ou le savant de la ville, Librairie encyclographique* (which started publishing on medical subjects in 1837), and the so-called *Bureau de la bibliothèque ecclésiastique*. One editor began translating recent scientific texts in German and sought to inform French readers of advancements east of the Rhine. Appearing between 1834 and 1836, this journal was titled *Minerve, ou choix de mémoires les plus importantes*, and it fed public hunger for up-to-date news on scientific progress.

Nonetheless, during this time, medical writing acquired new tone and emphasis. The wide-ranging, speculative, bawdy, and cheeky works, all which had appeared in the

postrevolutionary period, began to fade. These books, which had once constituted a tenuous part of official medicine, lost standing and respectability within the field. By the late Restoration, figures such as J.-L. Moreau de la Sarthe and J.-J. Virey seemed like anachronisms (though Virey kept publishing until the 1840s, despite the hostility of critics and colleagues); by 1830, Morel de Rubempré was beyond the pale of serious medical science, a reputation helped along by his dubious syphilis remedies.

Three factors, I suggest, contributed to this change between medicine, writing, and readership: greater levels of specialization and disciplinary exactitude among medical professionals; the separation of "social science" from the older "science of man" tradition in medicine and philosophy (above all with how doctors now emphasized quantification and stratification models); and the greater social and professional cohesion among medical practitioners that developed in the decades following the medical revolution. As way of conclusion, a few remarks should be said about each in turn.

First, medical writing was becoming more technical and specialized, above all with clinical studies and experimental physiology. It seems that "intermediary" medical works —books that engaged both medical professionals and lay readers alike—declined as a genre. Perhaps one of the last books in this tradition was Gendrin's *Traité philosophique de médecine pratique*, which appeared between 1838 and 1842. The technical spirit emerges in a number of works, but mentalities clearly began to change after François Magendie published his *Précis élémentaire de physiologie* in 1816–1817. In his programmatic overview of his research agenda, Magendie made it understood that he was pioneering a rigorous new form of experimental science and that he would have nothing to do with what he called "romantic" or "novelistic" forms of medical analysis and writing.[15] Surely his target was the speculative tradition of the *Naturphilosophen* and transcendental anatomy associated with Étienne Geoffroy Saint-Hilaire and his partisans, but he was also taking aim at the more fanciful and imaginative forms of medical writing that had captured the public's mind in the decades after the French Revolution.

Magendie's book set the tone for a new generation of medical researchers. The new biomedical writing was characterized by its delineated objects of study, its lack of philosophical or metaphysical speculation, and stricter adherence to experimental methods.[16] Good examples appear with Henri Blainville's *Cours de physiologie générale et comparée* (1833), as well as Scipion Pinel's *Physiologie de l'homme* (1833). At the same time, H. Milne Edwards published his mammoth *Éléments de zoologie* (1834) and François-Vincent Raspail finished his *Nouveau système de physiologie* (1837). In addition, French doctors and scientists now engaged the experimental and observational work being conducted in the German-speaking states, which would reach its apogee with the physiological program of Claude Bernard.

Other factors led medicine to lose its more literary and philosophical qualities. Beyond technical specialization, new forms of social thought were also emerging and these ideas helped eclipse the older "science of man" tradition, as practiced by doctors such as P.-J. Barthez and Pierre Cabanis.[17] Conservative intellectuals contributed to this change.[18] For example, Edmund Burke, Louis de Bonald, and Joseph de Maistre dismissed Enlightenment social thinking as too rationalistic and abstract, disassociated from real conditions of social and cultural life (though Bonald himself was indebted to medical

anthropology and physiological thought). Yet these ideas also appeared outside of conservative, ultramontane, or counter-Enlightenment circles and developed their own intellectual dynamic, as other intellectuals emphasized how human nature and experience were rooted in aggregate social experiences. Notably, these assumptions appeared in the advanced social thought developed by J.-C.-L. de Sismondi, Louis Blanc, Auguste Comte, and Utopianists such as C.-H. de Saint Simon and Charles Fourier.[19]

Comte expressed this new attitude best. Although he admired leading physiologists such as Xavier Bichat and F.-J.-V. Broussais—especially the latter's materialist philosophy—he claimed that the old science of man had been mistaken when it took individual "man," as an abstracted entity, as a model for human society. In contrast to this older tradition, Comte argued that observers must take people in aggregate forms, analyzing the dynamics of groups, movements, and trends: the individual was subsumed, in terms of social analysis, under the collective. He wrote, "The study of the individual and that of the race … are nevertheless sufficiently distinct, and above all both sufficiently developed, to be necessarily cultivated separately, and consequently conceived as forming two sciences, physiology properly so called and social physics."[20]

Comte was not alone. In essence, this new "sociological" approach undercut the prestige contemporaries once accorded to the medical science of man and how its practitioners claimed to speak the human condition writ large. This approach was further amplified by new forms of statistical analysis, as developed by hygienists such as Louis-René Villermé and L.-F. Benoiston de Châteauneuf, and was emblazoned, above all, in the mathematical social science of Adolphe Quetelet's *Sur l'homme* (1835). The avalanche of numbers undermined the old holistic and Hippocratic modes inherited from the eighteenth century.[21]

At the same time, medical professionals stopped looking outside of the scientific disciplines for intellectual models or research agendas. No longer did philosophers and metaphysicians set the standard, in a such a degree, for the "big questions" that medical practitioners hoped to answer, as when Old Regime and Revolutionary practitioners had followed thinkers such as David Hume or J.-J. Rousseau, or when they looked to Samuel Richardson as a literary model. The standard now came from the scientific disciplines themselves, as practitioners established what they considered germane and significant in their fields, including elements of form and style. The imaginative and philosophical, on the one hand, and the scientific and technical, on the other, began to inhabit separate worlds. The artist, the philosopher, or the writer might borrow from the one, but scientific medicine avoided borrowing from the other—at least not in direct formal terms. Julien Offray de La Mettrie, some eighty years before, had already predicted this trend when he said that it was doctors who should be teaching philosophers what to think about the human condition, and not the other way around.

Lastly, the medical community became more cohesive and stable as one generation of practitioners passed the torch to another, consolidating the institutional and intellectual accomplishments of the Paris hospitals. True, the profession now split itself between certified physicians and lower-class "health officers," and doctors still evinced a range of political, social, and religious views (though, as the work of Jacques Léonard has suggested, doctors tended toward a moderate understanding of constitutional

government and secular society—doctors, on average, remained prudent in their allegiances). That said, the professional chaos of the immediate revolution—in which France had four distinct groups of doctors practicing different types of medicine, all of whom had received their credentials in different ways and times—had abated. By the early 1820s, a new generation of medical practitioners were trained and assumed their professional careers under the aegis of well-solidified revolutionary medical laws and reforms. No longer active agents in recasting an entire professional and epistemological field, this new generation learned and worked within a stable but effective system of clinical method and instruction.[22] Though doctors increased their scientific knowledge and skills, they were no longer redefining the entire nature of their professional and disciplinary life, as had the practitioners in the late 1790s and early 1800s. No doubt they also lacked the profound sense that an entire world of meaning and power was up for grabs, as had the generation of practitioners who had experienced the French Revolution firsthand. Rather, by the 1830s, many doctors now asked how they might capitalize upon disciplinary and epistemological gains and progress scientific medicine further.

Here again, biomedical science mirrored broader values and opinions. During this time, prominent social observers argued that the revolutionary dynamic, both political and intellectual, had played itself out, especially after the 1830 July Revolution, a political event that had brought a full-fledged constitutional monarchy to France. For François Guizot—the liberal minister, professional historian, and erstwhile apologist for the July monarchy—the new king Louis-Philippe had bridged the dialectic between royalism and popular sovereignty and had thus turned the principles of 1789 into workable law and government.[23] France, it was said, had reconciled itself to the revolutionary experience and society could at last move forward and begin to deal with the changing realities created by industrialization and urban growth. A corner had been turned. At least, such was the hope in the 1830s, when the Orléans monarchy hewed the course of liberalism and greater political inclusion; soon, however, many critics (including medical personnel) had become disillusioned and frustrated with the regime and had begun searching for more radical solutions to deepening political and social challenges—not least those associated with working-class conditions.[24] Censorship and worker repression (especially after the Lyon strikes in the early 1830s) established a dubious political trend, and the cholera epidemic of 1832 exposed a seething underworld of class resentment.[25] The seeds of 1848 were already being sown.

Taken together, these larger factors transformed medical writing and shifted the postrevolutionary world of medicine, readership, and cultural undercurrents. To be clear, among contemporaries, medicine only gained in its power to explain human nature; and readers kept increasing their enthusiasm for biomedical knowledge and discovery. Science increasingly dominated the public mind as the nineteenth century progressed, and it touched literature and the arts in greater ways, notably with Claude Bernard's experimental models and the evolutionary and hereditarian models that followed the Darwinian revolution.[26] But here one often speaks of how medicine *influenced*, in rather unidirectional ways, the world of social, literary, philosophical, and aesthetic thought. Seldom one has a sense that biomedical science and lay audiences were engaged in a dynamic exchange, one in which the dialogue between science and culture was a two-

way street—a time when the "two cultures" shared similar scaffolding and looked at one another on more even footing.

In fact, the terms of this exchange were changing. As Juan Rigoli has shown, by the mid-nineteenth century, doctors were anxious to purge medical writing of its novelistic and philosophical qualities, thereby establishing its scientific and disciplinary bona fides outside of other narrative traditions. This was true, for example, with the "physiological" style associated with Alibert, Balzac, Brillat-Savarin, and Morel de Rubempré, all which had become suspect by the mid-1850s among the partisans of Magendie's and Bertrand's experimental medicine.[27] A similar development played out with the hysteria diagnosis in the 1820s, as Sabine Arnaud has demonstrated. Accordingly, when physicians "retrospectively" invented the hysteria diagnosis in the early nineteenth century, they elided earlier forms of cultural "enunciation" and the wider meanings they entailed, including the diverse writings and textual strategies that had been once used by doctors and lay observers alike.[28]

This new disciplinary sense contrasts with the intellectual scene found in the immediate aftermath of the French Revolution and the rapid medical innovation of the early 1800s, when medicine, readership, and larger cultural currents proved mutually reinforcing. In the eighteenth and early nineteenth centuries, it bears repeating, scientists and doctors were creating new forms and idioms for the modern disciplinary fields, segregating knowledge and experience into distinct frameworks now known as the arts and sciences. The modern term "physician–writer" exemplifies the depth of this change; it suggests a person who straddles two different worlds, sometimes at the peril of one or the other: medicine and writing as distinct, perhaps incompatible vocations. It differs from the time frame discussed in this study, a time in which disciplinary boundaries were more fluid and permeable. This fluidity, as has been argued, promoted greater diversity of form and genre within the medical community itself, and allowed greater diversity of expression (especially with political and social agendas).

This book has endeavored to recreate this intellectual and cultural setting. For it was in this setting that a wide variety of writers, both professional and lay alike, used biomedical science in creative and sometime subversive ways to understand their changing world and imagine themselves and other people in radically different ways. Medicine thus could open the door for people to understand human experience in a time and place fraught with change and haunted by the revolutionary past. Medicine might not provide all the keys to happiness or answer all questions about the human condition. However, it promised greater insights and greater potential for agency and control in the strange new world created by the French Revolution—and gave historical actors a medium through which they could express their conflicting dreams and anxieties.

Notes

Introduction

1. On science during the French Revolution, see Michel Serres, "Paris 1800," in *A History of Scientific Thought: Elements of a History of Science*, ed. Michele Serres (Oxford: Blackwell, 1995), and Charles C. Gillispie: "The *Encyclopédie* and the Jacobin Philosophy of Science: A Study in Ideas and Consequences," in *Critical Problems in the History of Science*, ed. M. Clagett (Madison: University of Wisconsin Press, 1969); "Science in the French Revolution," *Behavioral Science* 4 (1959): 67–73; and *Science and Polity in France: The Revolutionary and Napoleonic Years* (Princeton, NJ: Princeton University Press, 2004). On natural history and the revolutionary period, see R. W. Burkhardt, Jr., *The Spirit of System: Lamarck and Evolutionary Biology* (1977; Cambridge, MA: Harvard University Press, 1995); Dorinda Outram, *Georges Cuvier: Vocation, Science, and Authority in Post-Revolutionary France* (Manchester: Manchester University Press, 1984); and Emma C. Spary, *Utopia's Garden: French Natural History from Old Regime to Revolution* (Chicago: University of Chicago Press, 2000).

2. See Ludmilla J. Jordanova, "Medical Mediations: Mind, Body and the Guillotine," *History Workshop*, no. 28 (1989), 39–52, especially pp. 39–40. The starting points remain Michel Foucault, *Folie et déraison: histoire de la folie à l'âge classique* (Paris: Plon, 1961) and *Naissance de la clinique: une archéologie du regard médical* (Paris: Presses universitaires de France, 1963).

3. Étienne de Condillac, *Oeuvres complètes*, 32 vols. (Geneva: Slatkine, 1970), 2: 262–64.

4. On this background, see Lester S. King, *The Medical World of the Eighteenth Century* (Chicago: University of Chicago Press, 1958); cf. the comments in Anne C. Vila, *Suffering Scholars: Pathologies of the Intellectual in Enlightenment France* (Philadelphia: University of Pennsylvania Press, 2018), 10–11, who underscores a more "respectful" attitude toward medical practitioners in the Enlightenment. I explore these themes in chapter 1.

5. J.-E. Gilbert, *L'Anarchie médicale, ou la médecine considérée comme nuisible à la société*, 3 vols. (Neuchâtel: n.p., 1772).

6. SRM 132, d. 52, Duverin (médecin), "Essai sur les abus à corriger dans l'exercice de la médecine" (8 Mar. 1777).

7. AN F17 1246, *Arrêt du Conseil d'État du Roi, qui établit une Commission de Médecins à Paris, pour tenir une correspondance avec les médecins de provinces* (Paris: Imprimerie royale, 1776); and Félix Vicq d'Azyr, *Pièces concernant l'établissement fait par le Roi d'une commission ou société de médecine* (Paris: Imprimerie royale, n.d.), 3–4.

8. For medicine in Old Regime France, see Laurence Brockliss and Colin Jones, *The Medical World of Early Modern France* (Oxford: Clarendon, 1997); as well as Roy Porter, "The Eighteenth Century," in *The Western Medical Tradition: 800 BC to AD 1800*, Lawrence I. Conrad, et al. (New York: Cambridge University Press, 1995), 371–475; and the survey in Dorinda Outram, *The Body and the French Revolution: Sex, Class, and Political Culture* (New Haven, CT: Yale University Press, 1989), 41–67.

9. Michel Foucault, et al., *Les Machines à guérir* (Paris: Institut de l'environnement, 1976).

10. Caroline Hannaway and Ann La Berge, eds., *Constructing Paris Medicine* (Amsterdam and Atlanta: Rodopi, 1998). For historiographical appraisal, see Colin Jones, " 'New Medical History in France': The View from Britain," *French Historian* 2 (1987): 3–14; and L. J. Jordanova, "Has the Social History of Medicine Come of Age?" *Historical Journal* 36 (1993): 437–49.

11. On this cultural symbolism, see Jean-José Boutaric, *Laënnec, Balzac, Chopin et le stéthoscope: ou la diffusion de l'auscultation médiate durant la première moitié du XIXe siècle* (Paris: Glyphe et Biotem, 2004).

12. Roy Porter, *The Greatest Benefit to Mankind: A Medical History of Humanity* (New York: Norton, 1997), 307.

13. J.-B. Monfalcon, "Médecin," *Dictionnaire des sciences médicales* (Paris: Panckoucke, 1819), 31: 279–378, quote at p. 281.

14. See Jonathan Mason Warren, *The Parisian Education of an American Surgeon: Letters of Jonathan Mason Warren (1832–1835)*, ed. Russell Jones (Philadelphia: American Philosophical Society, 1978), 2, quoted in David McCullough, *The Greater Journey: Americans in Paris* (New York: Simon and Schuster, 2011), 132.

15. On Paris medicine and American practitioners, see John Harley Warner, *Against the Spirit of System: The French Impulse in Nineteenth-Century American Medicine* (Princeton, NJ: Princeton University Press, 1998).

16. Theodore Zeldin, *The French* (London: Harvill Press, 1983), 459; Foucault, *Naissance de la clinique*, 32. See also Zeldin's wonderful sketch in his *Ambition, Love and Politics*, vol. 1 of *France, 1848–1945* (Oxford: Clarendon, 1973), 23–42.

17. See Michel Foucault, *Naissance de la clinique*; David M. Vess, *Medical Revolution in France: 1789–1796* (Gainesville: University of Florida Press, 1975); and Erwin Heinz Ackerknecht, *Medicine at the Paris Hospital 1794–1848* (Baltimore, MD: Johns Hopkins University Press, 1967).

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64. Simon Schaffer, "Natural Philosophy and Public Spectacle in the Eighteenth Century," *History of Science* 21 (1983): 1–43.

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67. See Auguste Viatte, *Les Sources occultes du romantisme*, 2 vols. (Paris: Honoré Champion, 1928).

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70. Ferrone, *I profeti*, 77, 73.

71. Gillispie, "Jacobin Philosophy of Science."

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2. Medicine in the Boudoir

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2. Maurice Lever, *Sade: A Biography*, trans. Arthur Goldhammer (New York: Harcourt, 1993), 476–77.

3. Peter Weiss, *The Persecution and Assassination of Jean-Paul Marat as Performed by the Inmates of the Asylum of Charenton under the Direction of the Marquis de Sade*, intro. by Peter Brook (New York: Atheneum, 1984); Doug Wright, *Quills* (New York: Dramatists Play Service, 1996). On Sade's relations with François Simonet de Coulmier and Antoine-Athanase Royer-Collard, see Lever, *Sade*, 519–64.

4. Roger Shattuck, *Forbidden Knowledge: From Prometheus to Pornography* (New York: St Martin's, 1996), 299; with some nuances, see also Laurence Bongie, *Sade: A Biographical Essay* (Chicago: University of Chicago Press, 1998). At first glance, these scholars confirm David M. Morris when he claims that "the Marquis de Sade so thoroughly offends or resists the mentality of Anglo-American literary criticism that his works—when acknowledged at all—meet with a silence deeper and more ominous than censorship"; see "The Marquis de Sade and the Discourse of Pain: Literature and Medicine at the Revolution," in *The Languages of Psyche: Mind and Body in Enlightenment Thought*, ed. G. S. Rousseau (Berkeley: University of California Press, 1990), 291; also C. F. Martin, "From the Mark to the Mask: Notes on Libertinage and Utopianism," *Yale French Studies*, no. 94 (1998): 101–15. Cf. the extensive bibliography compiled by Michel Delon, which suggests Sadeian scholarship is anything but lacking: "Dix années d'études sadiennes (1968–1978)," *Dix-huitième siècle*, no. 11 (1979): 393–426; see also Robert Darnton, "The Real Marquis," *New York Review of Books* 46, no. 1 (14 Jan. 1999). For recent scholarship, see Josué V. Harari, *Scenarios of the*

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7. Morris, "Sade and the Discourse of Pain"; Anne C. Vila, *Enlightenment and Pathology: Sensibility in the Literature and Medicine of Eighteenth-Century France* (Baltimore, MD: Johns Hopkins University Press, 1998), 286–92.

8. On eighteenth-century libertinism, see Robert Darnton, *The Forbidden Best-Sellers of Pre-Revolutionary France* (New York: Norton, 1996), 90; as well as J.-M. Goulemot, "Toward a Definition of Libertine Fiction and Pornographic Novels," trans. Arthur Greenspan, *Yale French Studies*, no. 94 (1998): 133–45; Warren Roberts, *Morality and Social Class in Eighteenth-Century French Literature and Painting* (Toronto: University of Toronto Press, 1974); J. G. Turner, "The Properties of Libertinism," in *'Tis Nature's Fault: Unauthorized Sexuality During the Enlightenment*, ed. Robert P. Maccubin (New York: Cambridge University Press, 1987), 75–87.

9. Lynn A. Hunt, *The Family Romance of the French Revolution* (Berkeley: University of California Press, 1992), 125–26. Apparently, Sade's *La Philosophie dans le boudoir* failed to elicit the same public horror as his *Justine, La Nouvelle Justine*, and *L'Histoire de Juliette* (all which he published after the republic lifted censorship). The exception is Nicolas Restif de La Bretonne, who referenced *La Philosophie dans le boudoir* and its principal characters; see his *Monsieur Nicolas ou le coeur humain dévoilé* (1796) and *L'Anti-Justine ou les délices de l'amour* (1969), 3–4, as cited in Francoise Laugaa-Traut, *Lectures de Sade* (Paris: Colin, 1973), 86–88.

10. See Yves Belaval's "Préface," in D.-A.-F. de Sade, *La Philosophie dans le boudoir ou les instituteurs immoraux* (Paris: Gallimard, 1976), 19; and Jean Deprun, "Notice," in *Œuvres*, 3: 1255–78.

11. On revolutionary influences, see Michel Delon, "Sade Thermidorien," in *Sade: Écrire la crise*, ed. Michel Camus and Philippe Roger (Paris: Belfond, 1993), 99–117, and "Introduction," in *Œuvres*, 3: xiv; and Frappier-Mazur, *Writing the Orgy*, 122–29.

12. All references come from D.-A.-F. de Sade, *Œuvres*, ed. Michel Delon and Jean Deprun (Paris: Pléiade, 1990–98). I quote from the following English editions, though I have sometimes modified the translation: *The Complete Justine, Philosophy in the Bedroom, and Other Writings*, trans. Richard Seaver and Austryn Wainhouse (New York: Grove, 1965), *The 120 Days of Sodom and Other Writings*, trans. Richard Seaver and Austryn Wainhouse (New York: Grove, 1966), and *Juliette*, trans. Austryn Wainhouse (New York: Grove, 1968).

13. *Complete Justine*, 187; *Œuvres*, 3: 5.

14. Ibid., 191 [3: 10].

15. Ibid., 192 [3: 10].

16. Ibid., 91 [3: 9–10].

17. Ibid., 363 [3: 175].

18. Ibid., 359 [3: 171].

19. R. F. Brissendon, "*La Philosophie dans le boudoir*; or, A Young Lady's Entrance into the World," *Studies in Eighteenth-Century Culture* 2 (1972): 122–23, 128–29; and Maurice Blanchot, *Lautréamont et Sade* (Paris, 1967), 69–70. On sentimental fiction, see Janet Todd, *Sensibility: An Introduction* (London: Methuen, 1986); John Mullan, *Sentiment and Sociability: The Language of Feeling in the Eighteenth Century* (Oxford: Clarendon, 1990); G. J. Barker-Benfield, *The Culture of Sensibility: Sex and Society in Eighteenth-Century Britain* (Chicago: University of Chicago Press, 1992).

20. Pierre Choderlos de Laclos, *Les Liaisons dangereuses*, ed. René Pomeau (Paris: Flammarion, 1981), 75. There are clear similarities between the Laclos's protagonists and those of *La Philosophie dans le boudoir*, but cf. how Sade overlooked Laclos in his "Reflections on the Novel," in *120 Days of Sodom*, 97–116. The two may have quarreled while imprisoned at the Picpus hospital during the Terror. In any case, one commentator who found Laclos's novel one of the most corrupting books ever written found Sade to be infinitely worse; see *Le Tribunal d'Apollon ou jugement en dernier ressort de tous les auteurs vivans; libelle injurieux, partial et diffamatoire, par une société littéraire* (Paris, 1799), qtd. in Laugaa-Traut, *Lectures de Sade*, 56.

21. Simone de Beauvoir, *Faut-il brûler Sade?* (Paris: Gallimard, 1955), 12.

22. P.-H. Thiry d'Holbach, *System of Nature*, 3 vols. (New York: Garland, 1984), 1: v–vi. On Sade and d'Holbach, see Jean Deprun, "Quand Sade récrit Fréret, Voltaire et d'Holbach," in *Roman et Lumières au XVIIIe siècle*, ed. Werner Krauss *et al.* (Paris: Éditions Sociales, 1970), 331–40.

23. Sade, *Complete Justine*, 194 [3: 12]. Similarly in *L'Historie de Juliette*, the mother superior, Delbène, corrupts Juliette by "guid[ing] her back to Nature's fold and doctrine and caus[ing] her to see that all the fables whereby they have sought to bewitch her mind and clog her energies are in actuality worth of naught but derision." Like Eugénie, Juliette also embraces her libertine education by the likes of Noirceuil, Saint-Fond, and Madame de Clairwil. She tells Clairwil: "pray continue to instruct me, and rest assured you will nowhere find a more attentive nor an apter student.… From now on my whole ambition shall be someday to surpass my teacher"; *Juliette*, 8, 285 [3: 185, 429].

24. C.-A. Vandermonde, *Essai sur la manière de perfectionner l'espèce humaine*, 2 vols. (Paris: Vincent, 1756), 1: iv–v.

25. Samuel-Auguste Tissot, *Avis au peuple sur sa santé* (Lausanne: Zimmerli, 1761), 7.

26. On these writings, see D. A. Peterson, "The Literature of Madness: Autobiographical Writings by Mad People and Mental Patients in England and America from 1436–1975" (PhD thesis, Stanford University, 1977); and Roy Porter, *Mind-Forg'd Manacles: A History of Madness in England from the Restoration to the Regency* (Cambridge, MA: Harvard University Press, 1987), 229–73.

27. Julien Offray de La Mettrie, *L'Homme machine* (Paris: Folio, 1981), 211; Denis Diderot, *Entretien entre d'Alembert et Diderot*, ed. Jacques Roger (Paris: Flammarion, 1965), 85. For Sade's view of "creative evolution," see Pierre Klossowski, *Sade, My Neighbor* (Evanston: University of Illinois Press, 1991), 86. Klossowsky references Bergsonian vitalism. On Sade's materialism, see Warman, *Sade*, 69–86.

28. *Complete Justine*, 284 [3: 99].

29. *120 Days of Sodom*, 532 [1: 282].

30. *Complete Justine*, 203; *Œuvres*, 3: 20.

31. Ibid., 200 [3: 18].

32. Ibid., 200 [3: 18].

33. Sade, *Juliette*, 147 [3: 310]. For a similar reading, see Marcel Hénaff, *Sade, the Invention of the*

Libertine Body, trans. Xavier Callahan (Minneapolis: University of Minnesota Press, 1999), xii, 11, 19.

34. Sade, *Complete Justine*, 201 [3: 18].

35. Ibid., 248 [3: 64].

36. Ibid., 248 [3: 63].

37. [Boyer d'Argens?], *Thérèse philosophe, ou mémoires pour servir à l'histoire du P. Dirrag et de Mlle Eradice* (Paris: La Musardine, 1998), 72–74. On this point, see Cryle, *Geometry in the Boudoir*, chap. 4.

38. Lynn A. Hunt, "Pornography and the French Revolution," in *The Invention of Pornography: Obscenity and the Origins of Modernity, 1500–1800*, ed. Hunt (New York: Zone, 1993), 330.

39. *Complete Justine*, 229 [3: 46].

40. Ibid., 202 [3: 19].

41. Peter J. Bowler, "Bonnet and Buffon: Theories of Generation and the Problem of Species," *Journal of the History of Biology* 6 (1973): 272–76.

42. Samuel-Auguste Tissot, *L'Onanisme: Dissertation sur les maladies produites par la masturbation* (Lausanne: Chapuis, 1764), 3; also Achille Le Bègue de Presle, *Le Conservateur de la santé* (Paris: Didot, 1763), 312–14. Tissot's work was translated into English, French, German, Italian, Spanish, and Russian, and was reissued until the beginning of the twentieth century. See L. J. Jordanova, "The Popularisation of Medicine: Tissot on Onanism," *Textual Practice* 1 (1987): 68–79; as well as Thomas W. Laqueur, *Solitary Sex: A Cultural History of Masturbation* (New York: Zone, 2003).

43. Thomas DiPiero, "Disfiguring the Victim's Body in Sade's *Justine*," in *Body and Text in the Eighteenth Century*, ed. Veronica Kelly and Dorothea E. von Mücke (Stanford, CA: Stanford University Press, 1994), 247–65.

44. Klossowski, *Sade*, 127–35.

45. Mary Terrall, *The Man Who Flattened the Earth: Maupertuis and the Sciences in the Enlightenment* (Chicago: University of Chicago Press, 2002), 218–21; Roy Porter, " 'The Secrets of Generation Display'd': *Aristotle's Master-Piece* in Eighteenth-Century England," in *'Tis Nature's Fault*, 1–21.

46. Diderot, *Entretien*, 51.

47. Charles Bonnet, *Considérations sur les corps organisés*, 2 vols. (Neuchâtel: Fauche, 1779), 1: 120.

48. On generation theory, see Jacques Roger, *Les Sciences de la vie dans la pensée française au XVIIIe siècle: La Génération des animaux de Descartes à l'Encyclopédie*, 3rd ed. (Paris: Armand Colin, 1993); Elizabeth B. Gasking, *Investigations Into Generation, 1651–1828* (Baltimore: Johns Hopkins University Press, 1967). For helpful analysis, see Peter J. Bowler, "Bonnet and Buffon: Theories of Generation and the Problem of Species," *Journal of the History of Biology* 6 (1973): 259–81; M. H. Hoffheimer, "Maupertuis and the Eighteenth-Century Critique of Preexistence," *Journal of the History of Biology* 15 (1982): 119–44; as well as the recent collection, Nick Hopwood, Rebecca Flemming, and Lauren Kassell, eds., *Reproduction: Antiquity to Present Day* (Cambridge: Cambridge University Press, 2018), especially part III, "Inventing Reproduction."

49. La Mettrie, *L'Homme machine*, 210; Jacques Fabien Gautier d'Agoty, *Anatomie des parties de la generation de l'homme et de la femme, représentées avec leurs couleurs naturelles* (Paris: Brunet, 1773), 10.

50. *120 Days*, 277 [1: 240].

51. *Complete Justine*, 353 [3: 166].

52. Ibid., 249 [3: 64].

53. *Œuvres*, 3: 64.

54. C.-F. Volney, *La Loi naturelle, ou catéchisme du citoyen française*, ed. Gaston-Martin (1793 [Year II]; Paris: Colin, 1934), 108, 113, 138–39, 148. On this text, see L. J. Jordanova, "Guarding the Body Politic: Volney's Catechism of 1793," in *1789: Reading, Writing, Revolution*, ed. Francis Barker (Colchester: University of Essex Press, 1982), 12–21.

55. *Complete Justine*, 249–50 [3: 64–65].
56. Ibid., 470–71 [2: 143].
57. Ibid., 471 [2: 144].
58. *Juliette*, 322–23 [3: 464].
59. *Les 120 journées*, in *Œuvres*, 1: 158–59, 241–42, 355–56, 373–74.
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63. Ibid., 219 [3: 36].
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66. Ibid., 345 [3: 159].
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78. Ibid., 336 [3: 150].
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81. Thomas Hobbes, *Leviathan*, ed. J. C. A. Gaskin (New York: Oxford University Press, 1996), 85.
82. See also Thomas M. Kavanagh, "The Libertine Moment," *Yale French Studies*, no. 94, Libertinage and Modernity (1998): 79–100; and on Sadeian ethics, see Carpenter, *Acts of Fiction*, 43–65.
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84. Colin Jones, "Pulling Teeth in Eighteenth-Century Paris," *Past and Present*, no. 166 (2000): 100–45, at 144.
85. For counter-appraisals, see Roy Porter, "The Patient's View: Doing Medical History from Below," *Theory and Society* 14 (1985): 175–98, and "The Patient in England, c. 1660–c. 1800," in *Medicine and Society: Historical Essays*, ed. Andrew Wear (New York: Cambridge University Press, 1992), 91–118.

3. Writing Sexual Difference

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4. Seeing and Knowing

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17. Ibid., 1: 22–23.

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39. Ibid., 96.

40. Henry Mackenzie, *Harley, ou L'homme sensible, traduit de l'anglais, par J.-M. Plane* (Paris: P. S. Charpentier, 1797).

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42. On this background, see chapter 1.

43. J.-M. Plane, *Physiologie, ou l'art de connaître les hommes sur leur physionomie, ouvrage extrait de Lavater et de plusieurs autres excellens auteurs*, 2 vols. (Meudon: P.-S.-C. Demoilly, 1797), 1: 8.

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45. Ibid., 1: 219–20.

46. Ibid., 2: 115.

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48. Ibid., 2: 361–62.

49. Ibid., 2: 111.

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51. Ibid., 1: 204–05.

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56. On imagery of Robespierre, see Ann Rigney, "Icon and Symbol: The Historical Figure Called Maximilien Robespierre," in *Representing the French Revolution: Literature, Historiography, and Art*, ed. James A. W. Heffernan (Hanover, NH: University Press of New England, 1992), 106–34.

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60. See, for example, *Bibliographie physiognomique et métoposcopique, ou notice des principaux ouvrages qui traitent de la connaissance de l'homme* (Paris: Royez, n.d.).

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68. Ibid., 1: 117–19.

69. Ibid., 1: 121–22.

70. Edouard Hocquart, *Le Lavater des dames, ou l'art de connaître les femmes sur les physionomies, suivi d'un essai sur les moyens de procréer des enfants de l'esprit*, 4th ed. (Paris: Saintin, 1812). On the rage for breeding genius-like children, see chapter 5.

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72. Ibid., 13.

73. Lavater, *Essai*, 1: 35.

74. *Le Lavater portatif*, 17.

75. Johann Kaspar Lavater, *L'Art de connaître les hommes par la physionomie, par Gaspar Lavater. Nouvelle édition … augmentée d'une Exposition des recherches ou des opinions de La Chambre, de Porta, de Camper, de Gall, sur la physionomie, d'une histoire anatomique et physiologique de la face, etc.*, 10 volumes in 5, ed. J.-L. Moreau de la Sarthe and Jacques-Pierre Maygrier, trans. Antoine-Bernard Caillard (Paris: Depélafol, 1820).

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77. Ibid., 79.

78. Ibid., 5.

79. Ibid., 62fn.

80. Ibid., 65–66.

81. Ibid., 36–37.

82. Ibid., 23–26.

5. Sex and the Citizen

1. For helpful surveys of this literature, see Pierre Darmon, *Le Mythe de la procréation à l'âge baroque* (1977; Paris: Seuil, 1981), 134–41, 150–54; and Anne Carol, *Histoire de l'eugénisme en France: Les Médecins et la procréation XIXe-XX siècle* (Paris: Seuil, 1995), 20–26. Summaries can also be found in Dubuisson, *Tableau de l'amour conjugal, édition remise à la hauteur des connaissances d'aujourd'hui*, 4 vols. (Paris, 1812); and Auguste Debay, *Histoire des métamorphoses humaines et des monstruosités, stérilité, impuissance, procréation des sexes, calligénésie* (Paris, 1845).

2. Review of L.-J.-M. Robert, *Essai sur la mégalanthropogénésie*, in *Le Décade philosophique, littéraire et politique*, no. 9 (30 frimaire, Year X), 549–50.

3. The closest parallel was the upsurge of erotic literature in the 1740s, an event that Robert Darnton calls the "double explosion" of writings about sex and nature; see *The Forbidden Best-Sellers of Pre-Revolutionary France* (New York: Norton, 1996), 90.

4. See Charles Rosenberg, "Medical Text and Social Context: Explaining William Buchan's *Domestic Medicine*," in *Explaining Epidemics and Other Studies in the History of Medicine* (New York: Cambridge University Press, 1992), 32–56. On medical popularization, see J. and J.-L. Poirier, "La vulgarisation médicale: considérations philosopho-historiques," *Revue d'éducation médicale* 6 (1093): 184–90; L. J. Jordanova, "The Popularisation of Medicine: Tissot on Onanism," *Textual Practice* 1 (1987): 68–79; and Roy Porter, *Patients and Practitioners: Lay Perceptions of Medicine in Pre-Industrial Society* (New York: Cambridge University Press, 1985). Matthew Ramsey provides an excellent overview in his "The Popularization of Medicine in France, 1650–1850," in *The Popularization of*

Medicine 1650–1850, ed. Roy Porter (London: Routledge, 1992). On the "popular" and "elite" spheres of print culture, see Roger Chartier, *The Cultural Uses of Print in Early Modern France*, trans. Lydia G. Cochrane (Princeton, NJ: Princeton University Press, 1987).

5. Angus McLaren, *Reproductive Rituals: The Perception of Fertility in England from the Sixteenth Century to the Nineteenth Century* (London: Methuen, 1984); Roy Porter, "Mixed Feelings: The Enlightenment and Sexuality in Eighteenth-Century Britain," in *Sexuality in Eighteenth-Century Britain*, ed. Paul-Gabriel Boucé (Manchester: University of Manchester Press, 1982), and id., " 'The Secrets of Generation Display'd': *Aristotle's Master-piece* in Eighteenth-Century England," in *'Tis Nature's Fault: Unauthorized Sexuality during the Enlightenment*, ed. R. P. Maccubbin (New York: Cambridge University Press, 1985); and, most recently, Mary E. Fissell, "Making a Masterpiece: The Aristotle Texts in Vernacular Medical Culture," in *Right Living: An Anglo-American Tradition of Self-Help Medicine and Hygiene*, ed. Charles E. Rosenberg (Baltimore, MD: Johns Hopkins University Press, 2003), 59–87.

6. Roy Porter, "Spreading Carnal Knowledge or Selling Dirt Cheap? Nicolas Venette's *Tableau de l'amour conjugal* in Eighteenth-Century England," *Journal of European Studies* 14 (1984): 233–255.

7. FMP, ms. 5116, "Recueil d'observations tant de médecine que de chirurgie, avec un traité de la génération de l'homme et la manière de perfectionner l'espèce humaine et un recueil de plantes propres à chaque maladie," Oct. 1756; and Samuel-Auguste Tissot, *Avis au peuple sur sa santé* (Lausanne, 1761), 7.

8. On perceptions of late revolutionary decadence, see Ronald Schechter, "Gothic Thermidor: The *Bals des victimes*, the Fantastic, and the Production of Historical Knowledge in Post-Terror France," *Representations*, no. 61 (1998): 78–94.

9. *De la Propagation du genre humain, ou manuel indispensable pour ceux qui veulent avoir de beaux enfants de l'un ou l'autre sexe* (Paris, Year VII [1799]), vii–viii.

10. Robert Darnton, *The Corpus of Clandestine Literature in France, 1769–1789* (New York: Norton, 1995), 91.

11. Darmon, *Le Mythe*, 142–45.

12. Alexander Potts, "Beautiful Bodies and Dying Heroes: Images of Ideal Manhood in the French Revolution," *History Workshop Journal*, no. 30 (1990): 1–20; and Abigail Solomon-Godeau, "Male Trouble: A Crisis in Representation," *Art History* 16 (1993): 286–312.

13. Gustave Flaubert, *Madame Bovary, Provincial Lives*, trans. Geoffrey Wall (Harmondsworth: Penguin, 1992), 70.

14. *De la Propagation*, 115.

15. See Darnton, *Forbidden Best-Sellers*; Margaret C. Jacob, "The Materialist World of Pornography," in *The Invention of Pornography: Obscenity and the Origins of Modernity, 1500–1800*, ed. Lynn A. Hunt (New York: Zone, 1993), 198–99; and R. L. Dawson, "The *Mélange de poésies diverses* (1781) and the Diffusion of Manuscript Pornography in Eighteenth-Century France," in *Nature's Fault*, ed. Maccubbin, 237–38.

16. *De la Propagation*, 178.

17. Ramsey, "Medicine in France," 106.

18. Millot's work was replaced in 1829 by J. Morel de Rubempré, *Les Secrets de la génération, ou l'art de procréer à volonté des filles ou des garçons, de faire des enfants d'esprit, de les orner du bon de la beauté, de les avoir sains et robustes*, 12th ed. (1829; Paris, 1840). Morel de Rubempré packaged these revolutionary writings for middle-brow taste in Restoration society. On his work, see chapter 8.

19. Darmon, *Le Mythe*, 258; Carol, *Histoire*, 24–25.

20. *Journal des débats* (18 nivôse, Year X).

21. J.-A. Millot, *L'Art de procréer les sexes à volonté, ou Système complet de génération*, 2nd ed. (1800; Paris, Year IX [1801]), 301.

22. Millot, *L'Art*, 315, 317.

23. On the possible shift toward vaginal sex, see Tim Hitchcock, "Redefining Sex in Eighteenth-Century England," *History Workshop Journal*, no. 41 (1996): 73–90.

24. Michel Procope-Couteau, *L'Art de faire des garçons ou nouveau tableau de l'amour conjugal* (Montpellier, 1755).

25. Millot, *L'Art*, 196–97ff. On child care and obstetrics at the Paris clinics and hospitals, see Dora B. Weiner, *The Citizen-Patient in Revolutionary and Imperial Paris* (Baltimore, MD: Johns Hopkins University Press, 1993), 191–222.

26. Mary Terrall, *The Man Who Flattened the Earth: Maupertuis and the Sciences in the Enlightenment* (Chicago: University of Chicago Press, 2002), 218–21.

27. Guilhermond, *Lettre à Millot sur son système de la génération et sur l'art de procréer les sexes à volonté* (Paris, 1802).

28. Harvey Mitchell, "Rationality and Control in French Eighteenth-Century Medical Views of the Peasantry," *Comparative Studies in Society and History* 21 (1979): 101; Ramsey, "Popularization of Medicine," 113–14.

29. Lazarro Spallanzani, *Expériences pour servir à l'histoire de la génération des animaux et des plantes, avec une ébauche de l'histoire des êtres organisés avant leur fécondition* (Geneva, 1785).

30. M.-A. Thouret, *Application sur l'espèce humaine des expériences faites par Spallanzani sur quelques animaux, relativemenet à la fécondation artificielle des germes, ou résultat d'une expérience qui prouve que l'on peut créer des enfans avec le concours des deux sexes, mais sans leur approche* (Paris, Year XI [1803], 11. For the early history of artificial insemination, see F. N. L. Poynter, "Hunter, Spallanzani, and the History of Artificial Insemination," in *Medicine, Science, and Culture: Historical Essays in Honor of Oswei Temkin*, ed. L. G. Stevenson and R. P. Multhauf (Baltimore, MD: Johns Hopkins University Press, 1968).

31. Thouret, *Application*, 24, 29–30, 36.

32. Millot, *L'Art*, 30.

33. "Personne ne doute que ce soit l'homme qui, en fécondant la femme, vivifie et anime l'homocule dont les premiers éléments sont renfermés dans l'oeuf contenu dans l'ovaire"; Millot, *L'Art de procréer*, 219, 338–39.

34. *Lucina sine concubitu; Lucine affranchie des lois du concours; ouvrage singulier, traduit de l'anglais de Johnson par le citoyen Moet, dans lequel il est pleinement démontré par des preuves tirées de la théorie et de la pratique, qu'une femme peut concevoir et enfanter sans le commerce de l'homme*, trans. Moet (Paris, Year III). The translator called Roe's work, in particular, "contre les loix naturelles et civiles" (73). For discussion, see Lynn Salkin Sbiroli, "Lucina sine concubitu: procreazione tra scienza e ideologica," in *Medicina e biologia nella rivoluzione scientifica*, ed. Lino Conti (Perugia: Porziuncola, 1990), 256–66; J.-L. Fischer, "La Callipédie ou l'art d'avoir de beaux enfants," *Dix-huitième siècle*, no. 23 (1991): 141–58.

35. Millot, *L'Art*, 65.

36. K. R. Benson, "Observation Versus Philosophical Commitment in Eighteenth-Century Ideas of Regeneration and Generation," in *A History of Regeneration Research: Milestones in the Evolution of a Science*, ed. C. E. Dinsmore (New York: Cambridge University Press, 1991), 93, 100.

37. Millot, *L'Art*, 105.

38. J.-A. Millot, *L'Art d'améliorer et de perfectionner les hommes au moral comme au physique*, 2 vols. (Paris, 1801 [Year X]), 2: 234.

39. On Robert, see Quinlan, "Physical and Moral Regeneration," 157–59; and Anne Verjus, "'L'éminente noblesse du mérite': distinction et transmission des talents dans la pensée républicaine, 1780–1810," paper presented at the XIe Congrès des Lumières, 3–10 Aug. 2003.

40. L.-J.-M. Robert, *Essai sur la mégalantropogénésie, ou l'art de faire des enfants d'esprit, qui deviennent des grands hommes; suivi des traits physiognomoniques propres à les faire reconnaître, décrits par Lavater, et du meilleur mode de génération* (Paris, 1801), 14–15, 17, 19–20.

41. C.-A. Helvétius, *Oeuvres complètes*, 9 vols. (Paris, 1795), 1: 189–91; on Robert's response, see *La Mégalantropogénésie*, 29; id., *Nouvel essai sur la mégalantropogénésie ou l'art de faire des enfants d'esprit, qui deviennent de grands hommes*, 2nd ed., 2 vols. (Paris, Year XI [1803]), 1: ix; and id., *Coup d'œil physiologique et médical sur la mégalantropogénésie* (Paris, Year XI [1803]), 39. Usually, doctors rejected Helvétius's environmentalism as biologically unfounded. See Moravia, *Il pensiero*, 151–65.

42. Robert, *Essai*, 33–34, 47–49, 60, 230–31.

43. L.-J.-M. Robert, *Existe-t-il un art physico-médical pour augmenter l'intelligence de l'homme, en perfectionnant ses organes, ou la Mégalantropogénésie n'est-elle qu'une erreur?* (Paris, Year XI).

44. Review of Robert, *Essai sur la mégalantropogénésie*, in *Le Décade philoso-phique, littéraire et politique*, no. 9 (30 frimaire, Year X), 549–50; and [H.D.], "À l'auteur de la Mégalanthropogénésie, ou l'art de faire des enfans d'esprit," *Le Décade philosophique, littéraire et politique*, no. 5 (20 brumaire, Year X), 304.

45. Barré, Radet, Desfontaines, and Dieulafoi, *L'Isle de la mégalantropogénésie, ou les savans de la naissance* (Paris, 1807).

46. *La megalantropogenesia, ossia l'isola sapiente*, trans. Luigi Bossi (Venice, 1807). Bossi reported that the Paris performance "Fu moltissimo applaudito, come una novità spiritosa: fu replicato moltissime volte, et sempre con numeroso concorso" (46); however, he complained that Italian-speaking audiences were less enthusiastic about the earlier Turin performances because the play smacked of French science and rationalism.

47. On these debates, see chapter 1.

48. See L.-J.-M. Robert, *Manuel de santé, ou nouveaux éléments de médecine pratique, d'après l'état actuel de la science et la méthode analytiqe de Pinel et de Bichat, à l'usage des médecins, chirurgiens, curés et autres habtans de la campagne*, 2 vols. (Paris, Year XIII [1805]).

49. L.-J.-M. Robert, *De l'Influence de la Révolution française sur la population; ouvrage où l'on prouve qu'elle a augmenté depuis dix ans, où l'on en donne les causes morales et politiques*, 2 vols. (Paris, Year XI [1802]), 1: 93.

50. Robert, *Coup d'oeil*, 9, 39. As Robert elsewhere put it, "L'égalité des conditions et des fortunes étant reconnue aujourd'hui une chimère, il doit y avoir autant d'éducations diverse, qui'il y a d'ordres différentes dans la société"; *De l'Influence*, 2: 49–50.

51. Millot, *L'Art d'améliorer*, 2: 39.

52. On Robert's ovism, see *Nouvel essai*, 1: 32–57, 58–69.

53. Robert, *Essai sur la mégalantropogénésie*, 230–31, and id., *Coup d'oeil*, ii, 18–19, 39.

54. L.-J.-M. Robert, *L'Art de prévenir le cancer au sein chez les femmes, qui touchent à leur époque critique, ou qui peuvent craindre cette funeste maladie, à la suite d'un dépôt laiteux ou d'une contusion* (Paris, 1812), and id., *De la musique considérée sous les rapports de son influence sur les moeurs, le passions et la santé* (Marseilles, 1807), 10–11. On the charge that Robert's books appealed largely to women, see *Défenseurs de la Patrie* (26 brumaire, Year X).

55. See Carla Hesse, *Publishing and Cultural Politics in Revolutionary France, 1789–1810* (Berkeley: University of California Press, 1991), especially chaps. 5 and 6; and, more generally, Louis Bergeron, *France Under Napoleon*, trans. Robert R. Palmer (Princeton, NJ: Princeton University Press, 1981).

56. J.-J. Virey, *De l'Éducation publique et privée des français* (Paris, Year X [1802]), i, v–viii, xiii, xiv; he later expanded these views in his *L'Art de perfectionner l'homme, ou de la médecine spirituelle et morale*, 2 vols. (Paris, 1808).

57. J.-J. Virey, "La mégalanthropogénésie," *Dictionnaire des sciences médicales, par une société de médecins et chirurgiens*, 60 vols. (Paris, 1812–22), 135.

58. Virey, *De l'Éducation*, 75.

59. These ideas, as seen in chapter 3, appeared more fully in Virey's *De la femme sous ses rapports physiologique, moral et littéraire* (1825).

60. Robert made this same point; *Coup d'oeil*, 36–27. See A. C. Vila, "Sex, Procreation, and the Scholarly Life from Tissot to Balzac," *Eighteenth-Century Studies*, 35 (2002): 239–46.

61. Virey, "La mégalanthropogénésie," 143.

62. On the conventions of émigré writing, see Malcolm Cook, "The Emigré Novel," in *The French Emigrés in Europe and the Struggle Against Revolution, 1789–1814*, ed. Kirsty Carpenter and Philip Mansel (London: Palgrave Macmillan, 1999), 151–64.

63. A. G*** de B. S. O., *La Philopédie, ou avis aux époux sur l'art d'avoir des enfans sans passions* (Paris, 1808), 2.

64. *La Philopédie*, 7–8.

65. *La Philopédie*, 25–26, 31, 34–35.

66. *La Philopédie*, 191, 198–99.

67. Michel Foucault, *The History of Sexuality: An Introduction*, trans. Robert Hurley (New York: Vintage, 1990 [1978]), 138–39. For a similar take on the biopower theory, see Giorgio Agamben, *Homo Sacer: Sovereign Power and Bare Life*, trans. Daniel Heller-Roazen (Stanford, CA: Stanford University Press, 1998).

68. Michel Foucault, "Governmentality," in *Power*, vol. 3, *The Essential Works of Foucault 1954–1984*, ed. James D. Faubion (New York: New Press, 2000), 201–22, quote at 219; and id., "The Political Technology of Individuals," in *Power*, 403–17.

69. Carol, *Histoire de l'eugénisme*, 20–26.

70. For the term "Quack Street," see Colin Jones, "Pulling Teeth in Eighteenth-Century Paris," *Past and Present*, no. 166 (2000): 100–45. On the medical marketplace model, see Harold J. Cook, *The Decline of the Old Medical Regime in Stuart London* (Ithaca, NY: Cornell University Press, 1986); and for criticism, see Margaret Pelling, *Medical Conflicts in Early Modern London: Patronage, Physicians, and Irregular Practitioners 1550–1640* (New York: Oxford University Press, 2003).

71. Katherine Binhammer, "The Sex Panic of the 1790s," *Journal of the History of Sexuality* 6 (1996): 409–35; and Dror Wahrman, "*Percy's* Prologue: From Gender Play to Gender Panic in Eighteenth-Century England," *Past and Present*, no. 159 (1999): 1–41; but cf. Lynn Hunt and Margaret Jacob, "The Affective Revolution in 1790s Britain," *Eighteenth-Century Studies* 34 (2001): 491–521.

72. Thomas W. Laqueur, *Maxing Sex: Body and Gender from the Greeks to Freud* (Cambridge, MA: Harvard University Press, 1990), 149–92.

73. Thomas W. Laqueur, "Amor Veneris, vel Dulcedo Appeletur," in *Fragments for a History of the Human Body*, ed. M. Feher (New York: Zone Books, 1989), 90–131; Londa Schiebinger, "Skeletons in the Closet: The First Illustrations of the Female Skeleton in Eighteenth-Century Anatomy," in *The Making of the Modern Body: Sexuality and Society in the Nineteenth Century*, ed. Catherine Callagher and Thomas Laqueur (Berkeley: University of California Press, 1987), 83–106.

74. Thomas W. Laqueur, "Orgasm, Generation, and the Politics of Reproductive Biology," in *Making of the Modern Body*, ed. Gallagher and Laqueur, 1–41.

75. Londa Schiebinger, *Nature's Body: Gender in the Making of Modern Science* (Boston, 1993). On the political context, see Joan B. Landes, *Women and the Public Sphere in the Age of the French Revolution* (Ithaca, NY: Cornell University Press, 1988); and Dorinda Outram, *The Body and the French Revolution: Sex, Class, and Political Culture* (New Haven, CT: Yale University Press, 1989); but cf. Hunt, *Family Romance*, 193–204; and Hesse, *Other Enlightenment*, on how the French Revolution undermined patriarchy and helped mold modern feminist thought. For a nuanced appraisal of medicine and gender relations, based largely upon archival and manuscript sources, see Lindsay Wilson, *Women and Medicine in the French Enlightenment: The Debate over Maladies des Femmes* (Baltimore, MD: Johns Hopkins University Press, 1993).

76. The best overview of all these debates appear in Helen King, *The One-Sex Body on Trial: The Classical and Early Modern Evidence* (New York: Routledge, 2016).

77. On pro-woman thought, see Dena Goodman, *The Republic of Letters: A Cultural History of the French Enlightenment* (Ithaca, NY: Cornell University Press, 1994); chap. 2; and the political consequences in 1790s England, see Barbara Taylor, "Feminists Versus Gallants: Manners and Morals in Enlightenment Britain," *Representations* 87 (2004): 125–48.

78. McLaren, "The Pleasures of Procreation," 340; and Margaret Jacob, *The Newtonians and the English Revolution, 1689–1720* (Ithaca, NY: Cornell University Press, 1976), 15–71.

6. Sculpting Ideal Bodies

1. See the comments in P. N. Gerdy, *Anatomie des formes extérieures du corps humain, appliquée à la peinture, à la sculpture et à la chirurgie* (Paris: Béchet jeune, 1829), 145.

2. On this piece, see Philippe Malgouyres and Jean-Luc Martinez, *Beau comme l'Antique* (Paris: Réunion des Musées Nationaux, 2000), 20–23; and Jean-Pierre Cuzin, Jean-René Gaborit, and Alain Pasquier, *D'Après l'antique* (Paris: Réunion des Musées Nationaux, 2000), 276–95. The best source remains Francis Haskell and Nicholas Penny, *Taste and the Antique: The Lure of Classical Sculpture, 1500–1900* (New Haven, CT: Yale University Press, 1981), 221–24. The *Borghese Gladiator* is now believed to be a Roman copy (ca. 200 CE) of a Greek original dating from 100–175 BCE.

3. Robert W. Berger, *Public Access to Art in Paris: A Documentary History from the Middle Ages to 1800* (University Park: Penn State University Press, 1999), 276–77; and Cuzin, Gaborit, and Pasquier, *D'Après l'antique*, 276–95.

4. [Antoine] Mongez, "Mémoire sur les gladiateurs, et sur deux des statues antiques désignées par le nom de Gladiateurs," *Mémoires de l'Institut National des sciences et arts*, 3e classe, *Littérature et beaux arts*, vol. 2 (Paris: Baudonin, Year VIII), 423–68 (at p. 466); Esprit-Antoine Gibelin, "Mémoire sur la statue antique dénommée le Gladiateur de Borghèse," *Mémoires de l'Institut national des sciences et arts*, 3e classe, *Littérature et beaux arts* (Paris: Baudoin, Year XI), 492–504 (at p. 492).

5. Jean Galbert Salvage, *Anatomie du gladiateur combattant, applicable aux beaux arts, ou traité des os, des muscles, du mécanisme des mouvements, des proportions et des caractères du corps humain* (Paris: Chez l'auteur/de l'imprimerie de Mame, 1812).

6. The most recent is "Figures du corps: une leçon d'anatomie aux Beaux-Arts," exposition by Philippe Comar at the École Nationale Supérieure des Beaux-Arts, Oct. 21, 2008–January 4, 2009. On earlier exhibitions, see Philippe Sénéchal, "L'anatomie du Gladiateur combattant de Jean-Galbert Salvage: science et art à Paris sous l'Empire," in *Curiosité: Études d'histoire de l'art en honneur d'Antoine Shnapper*, ed. Oliver Bonfait, Véronique Gerald Powell, and Philippe Sénéchal (Paris: Flammarion, 1998), 219–28 (at p. 224 n. 1).

7. Dorothy Johnson, *Jacques-Louis David: Art in Metamorphosis* (Princeton, NJ: Princeton University Press, 1993), 156–61; Meredith Shedd, "Prometheus the Primeval Sculptor: Archaeology and Anatomy in Emeric-David's *Recherches sur l'art statuaire*," *Zeitschrift für Kunstgeschichte*, 1 (1991): 88–106; and Sénéchal, "Science et art."

8. Athena S. Leoussi, "Phedias and 'l'esprit moderne': The Study of Human Anatomy in Nineteenth-Century English and French Art Education," *European Review of History/Revue européenne d'histoire*, 7 (2000): 167–88.

9. See Lynn A. Hunt, *Politics, Culture, and Class in the French Revolution* (Berkeley: University of California Press, 1984); Mona Ozouf, *L'Homme régénéré: Essais sur la Révolution française* (Paris: Gallimard, 1989); and Antoine de Baecque, *Le Corps de l'histoire: Métaphores et politique* (Paris: Calmann-Lévy, 1993).

10. See Thomas Crow, *Emulation: Making Artists for Revolutionary France* (New Haven, CT: Yale University Press, 1995).

11. On this metaphor, see Aurélia Gaillard, *Le Corps des statues: Le Vivant et son simulacre à l'âge*

classique (de Descartes à Diderot) (Paris: Champion, 2003), 87–135.

12. For a short overview, see J.-J. Virey, "Nécrologie," *Moniteur Universel*, no. 355, 21 Dec. 1813.

13. *Archives parlementaires*, 3 Mar. 1793.

14. Sénéchal, "Science et art," 221–22.

15. Gotthold Ephraim Lessing, *Du Laocoön, ou des limites respectives de la poésie et de la peinture*, trans. M. M. Charles de Boudens, vicomte de Vanderbourg (Paris, 1802). On the J.-L. Moreau de la Sarthe's translation of Lavater, see chapter 3.

16. See P.-N. Navier, *Réflexions sur les dangers des exhumations précipitées, et sur l'abus des inhumations dans les églises* (Amsterdam and Paris, 1775). For context, see Alain Corbin, *Le Miasme et la jonquille: L'Odorat et l'imaginaire social XVIIIe–XIXe siècles* (Paris: Flammarion, 1986).

17. [Anon.], review of J.-G. Salvage, *Anatomie du Gladiateur combattant*, in *Journal général de la littérature de France ou Répertoire méthodique des livres nouveaux, cartes géographiques, estampes et oeuvres de musique*, vol. 16 (1813), 26–27 (at p. 27); and [anon.], review of J.-G. Salvage, *Anatomie du Gladiateur combattant*, in *Journal des arts, des sciences et de la littérature*, vol. 3, no. 159 (25 June 1812), 385–92 (at pp. 391–92).

18. James Longrigg, *Greek Rational Medicine: Philosophy and Medicine from Alcmaeon to the Alexandrians* (London: Routledge, 1993), 184; and on dissection practices in Alexandria—the exception in the Mediterranean world—see Heinrich Van Staden, *Herophilus: The Art of Medicine in Early Alexandria—Edition, Translation, and Essays* (New York: Cambridge University Press, 1989), 162–63.

19. J.-G. Salvage, *Prospectus, suivi du rapport … à l'Institut, classe des Beaux-Arts, le 9 Brumaire an XIII* (Paris, n.d.), 1.

20. Salvage [doct.-méd. de la Faculté de Montpellier], "De la science de l'anatomie des arts," *Gazette de Santé*, no. 26 (11 Sept. 1808), 208.

21. ENSBA, ms. 217, Lubert; and ENSBA ms. 294, Alexandre Lenoir, "Théorie l'expression en peinture" (n.d.).

22. Barbara Maria Stafford, *Body Criticism: Imaging the Unseen in Enlightenment Art and Medicine* (Cambridge, MA: The MIT Press, 1991), 47–129.

23. James Elkins, "Two Conceptions of the Human Form: Bernard Siegfried Albinus and Andreas Vesalius," *Artibus et Historiae* 7 (1986): 91–106 (at pp. 91–94).

24. J.-J. Suë (le fils), *Essai sur la physionomie des corps vivants* (Paris, Year V [1797]), 4–5.

25. ENSBA, ms. 223, Suë (le père), "De l'ostéologie" (n.d.).

26. These favorable comments about Salvage appeared in the review of a competing anatomy textbook; see Marie de Saint-Ursin, review of J. P. Maygrier, *Manuel de l'anatomiste, ou précis raisonné de la manière de préparer soi-même toutes les parties de l'anatomie* (Paris), in *Gazette de Santé*, no. 5 (11 Feb. 1807), 40.

27. Salvage, *Anatomie*, "Préface."

28. See Dominique Poulot, *Musée, nation, patrimoine, 1789–1815* (Paris: Gallimard, 1997); and Pierre Arizzoli-Clémentel, Philippe Bordes, and Régis Michel, eds., *Aux Armes et aux arts!: Les Arts de la Révolution, 1789–1799* (Paris: Biro, 1988).

29. Pommier, *L'Art de la liberté*, 59–91.

30. *Dictionnaire des arts de peintre*, ed. C.-H. Wetelet and P. Levesque (Paris, 1792), s.v. "Peintre," qtd. in Pommier, *L'Art de la liberté*, 12.

31. Alex Potts, "Beautiful Bodies and Dying Heroes: Images of Ideal Manhood in the French Revolution," *History Workshop Journal*, no. 30 (1990), 1.

32. Johann Joachim Winckelmann, *Histoire de l'art chez les anciens*, 2 vols. (Paris: Saillant, 1766), 1: 319, 323. For analysis, see Alex Potts, *Flesh and the Ideal: Winckelmann and Origins of Art History* (New Haven, CT: Yale University Press, 1994).

33. Pommier, *L'Art de la liberté*, 61–62, 78–79.

34. J.-J. Winckelmann, *Monuments inédits de l'antiquité, statues, peintures antiques, pierres gravées, bas-reliefs de marbre et de terre cuite*, trans. A. F. Désodouards, 3 vols. (Paris: David & Leblanc, 1808), 1: 60.

35. Annie Becq, "Esthétique et politique sous le Consulat et l'Empire: la notion de beau idéal," *Romantisme: Revue du XIXe siècle* 16 (1986): 23–38.

36. Johnson, *Art in Metamorphosis*, 161–62.

37. AI, ms. 3A4, séance publique du 15 vendémiaire, an X, "Quelles ont été les causes de la perfection de la sculpture antique, et quels seraient les moyens d'y atteindre?"

38. Potts, *Flesh and the Ideal*, 30–31.

39. T.-B. Emeric-David, *Recherches sur l'art statuaire, considéré chez les anciens et chez les modernes* (Paris: Nyon ainé, an XIII [1808]), 26, 56–57.

40. On Vicq d'Azyr's text, see Stafford, *Body Criticism*, 108.

41. Emeric-David, *Recherches*, 201–02, 510–11; see also ENSBA, ms. 224, Suë (le père), "Discours sur les os approprié à l'utilité des élèves en l'art de la peinture et de sculpture" (n.d.).

42. Émeric-David, *Recherches*, 200–01, 336, 498.

43. Ibid., 200–01, 336, 498; Salvage echoed him: *Anatomie*, 1.

44. Salvage, *Anatomie*, 13–14.

45. On Le Brun, see Stephanie Ross, "Painting the Passions: Charles Le Brun's *Conférence sur l'expression*," *Journal of the History of Ideas* 45 (1984): 25–57.

46. Salvage, "Du mécanisme des mouvements du corps humain," *Gazette de Santé*, couverture du no. 4 (1 Feb. 1809), n.p.

47. Salvage, *Anatomie*, 22 n. 1.

48. For instance, in 1812, Salvage remarked that peace was one significant factor in improving the arts, hardly an inconsequential statement to make as Napoleon marched into Russia. This comment undermined Emeric-David's bureaucratic authoritarianism, not least his view that war helped progress the arts. It also suggests that Salvage infused the Gladiator project with insistent political desires. See ibid., iv.

49. Here I am drawing upon my essay, "Men Without Women: Masculinity, Male Sociability, and Revolutionary Politics in France, 1789–1815," in *French Masculinities: History, Culture, and Politics*, ed. Christopher Forth and Bertrand Taithe (London: Palgrave, 2007). For a view on the other side of the English Channel, see Lynn Hunt and Margaret Jacob, "The Affective Revolution in 1790s Britain," *Eighteenth-Century Studies* 34 (2001), 491–521.

50. Ewa Lajer-Burcharth, "The Muscadins and Merveilleuses: Body and Fashion in Public Space under the Directory, 1795–99," in *Repression and Expression: Literary and Social Coding in Nineteenth-Century France*, ed. Carrol F. Coates (New York: Peter Lang, 1996).

51. Michel Foucault, *Les Mots et les choses*, 9–10.

52. See Eve Kosofsky Sedgwick, *Between Men: English Literature and Male Homosocial Desire* (New York: Columbia University Press, 1985). On revolutionary clubs, see Dominique Godineau, *Citoyenne tricoteuses: Les Femmes du peuple à Pairs pendant la Révolution française* (Aix-en-Province: Alinea, 1988).

53. Thomas Crow, "Revolutionary Activism and the Cult of Male Beauty in the Studio of David," *Fictions of the French Revolution*, ed. Bernadette Fort (Evanston, IL: Northwestern University Press, 1991), 55.

54. Hunt, *Politics, Culture, and Class*, pp. 94–119; and Tony Halliday, *The Temperamental Nude: Class, Medicine and Representation in Eighteenth-Century France* (Oxford: Voltaire Foundation, 2010), chap. 7.

55. Lajer-Burcharth, *Necklines*, 220–21.

56. Pierre Suë, *Éloge historique de Marie-Français-Xavier Bichat* (Paris: Delance, 1803); Henri-Marie Husson, *Notice historique sur la vie et les travaux de Marie-Fr.-Xav. Bichat* (Paris: Stoupe, 1802), 20–21;

and *Notice sur Marie-François-Xavier Bichat* (Paris: Giguet et Michaud, 1802).

57. E.-F. Miel, *Essai sur le Salon de 1817, ou examen critique des principaux ouvrages* (Paris: Delaunay, 1817), 117, qtd. in Robert Rosenblum, *Transformations in Late Eighteenth Century Art* (Princeton, NJ: Princeton University Press, 1967), 38–39.

58. Virey, "Nécrologie," n.p.

59. I should like to thank Rosanna Lauriola for helping me identify the classical references in this image. On this iconography, see also Sénéchal, "Science et art."

60. Winckelmann, *Histoire*, 1: 75.

61. Stafford, *Body Criticism*, 466.

62. Abigail Soloman-Godeau, "Male Trouble: A Crisis in Representation," *Art History* 16 (1993): 286–312.

63. See Jean-Claude Bonnet, "Les formes de célébration," in *La Mort de Marat*, ed. Bonnet (Paris: Flammarion, 1986), 101–128; and de Baecque, *Le Corps de l'histoire*, 352–60.

7. The Mesmerist Renaissance

1. A.-M.-J. Puységur, *Du Magnétisme animal, considéré dans ses rapports avec diverses branches de la physique générale*, 2nd ed. (Paris: Cellot, 1809), 32.

2. This approach characterizes Charles C. Gillispie's *Science and Polity in France at the End of the Old Regime* (Princeton, NJ: Princeton University Press, 1980), 261–89.

3. Henri F. Ellenberger, *The Discovery of the Unconscious: The History and Evolution of Dynamic Psychiatry* (New York: Basic Books, 1981), 70–76; see also Maria M. Tatar, *Spellbound: Studies on Mesmerism and Literature* (Princeton, NJ: Princeton University Press, 1978), 26–31.

4. I have discussed some of these themes in my "Shocked Sensibility: The Nerves, the Will, and Altered States in Sade's *L'Histoire de Juliette*," *Eighteenth-Century Fiction* 25, no. 3 (2013): 533–56.

5. J.-B. Demangeon, *Physiologie intellectuelle ou développement de la doctrine du professeur Gall sur le cerveau et ses fonctions considérés sous le rapport de l'anatomie comparée, de l'organologie* (Paris: Delance, 1806), 115.

6. John Warne Monroe, *Laboratories of Faith: Mesmerism, Spiritism and Occultism in Modern France* (Ithaca, NY: Cornell University Press, 2008).

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9. Riskin, *Science*, 204–05.

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11. Robert Darnton, *Mesmerism and the End of the Enlightenment in France* (Cambridge, MA: Harvard University Press, 1968), 62–64.

12. See Margarethe Hansmann, "Mesmer in Wien," in *Franz Anton Mesmer und die Geschichte des Mesmerismus*, ed. Heinz Schott (Stuttgart: Franz Steiner, 1985), 51–67; as well as Tatar, *Spellbound*, 3–24.

13. Darnton, *Mesmerism*, 47–55.

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15. Lindsay Wilson, *Women and Medicine in the French Enlightenment: The Debate over "Maladies des Femmes"* (Baltimore, MD: Johns Hopkins University Press, 1993), 104–24.

16. Riskin, *Science*, 209–25; Caroline C. Hannaway, "Medicine, Public Welfare, and the State in

Eighteenth-Century France: The Société Royale de Médecine de Paris (1776–1793)" (PhD thesis, Johns Hopkins University, 1974), 368–78.

17. See Hannaway, "Medicine," 340–78; and Wilson, *Women*, 106–16.

18. Darnton, *Mesmerism*, 47–81.

19. *Mémoires secrets pour servir à l'histoire de la république des lettres en France*, vol. 25 (London, 1786), 254, qtd. in François Azouvi, "Affrontements," in Charles de Villers, *Le magnétiseur amoureux … précédé de La polémique du magnétisme animal … et suivi de Documents sur l'histoire du mesmérisme*, comp. and ed. François Azouvi (Paris: Vrin, 2006), 30.

20. Brockliss and Jones, *Medical World*, 792, qtd. in Arnaud, *On Hysteria*, 220.

21. Ellenberger, *Discovery*, 70–71.

22. "Lettre de M. Clocquet, receveur des gabelles à Soissons à M.***," in A.-M.-J. Puységur, *Détail des cures opérées à Buzancy, près Soissons, par le magnétisme animal* (Soissons: n.p., 1784), 7.

23. "Lettre de M. Clocquet," in Puységur, *Détail*, 8.

24. A.-M.-J. Puységur, *Mémoires pour servir à l'histoire et à l'établissement du magnétisme animal* (N.p.: n.p., 1784), 21.

25. *Encyclopédie ou dictionnaire raisonné des sciences, des arts et des métiers, 36 vols., ed. Denis Diderot* (Geneva: Pellet, 1777–79), s.v. "Somnambule, somnambulisme."

26. Puységur, *Mémoires*, 36.

27. "Lettre de M. Clocquet," in Puységur, *Détail*, 9–11

28. Puységur, *Détail*, 16.

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30. A.-M.-J. Puységur, *Suite des mémoires pour servir à l'histoire et à l'établissement du magnétisme animal* (London: n.p., 1785), 7–8.

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32. J.-P.-F. Deleuze, *Histoire critique du magnétisme animal*, 2 vols., 2nd ed. (Paris: Belin-Leprieur, 1819), 1: 174.

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45. On Petetin, see Arnaud, *On Hysteria*, 224–25; Jan Goldstein, *Hysteria Complicated by Ecstasy: The Case of Nanette Leroux* (Princeton, NJ: Princeton University Press, 2010), 47–48, 85–86; and François Zanetti, *L'Electricité médicale dans la France des Lumières* (Oxford: Voltaire Foundation, 2017), 231–34.

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66. Ibid., xi.

67. Ibid., 26, 13.

68. Ibid., 62.

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70. Puységur, *Du Magnétisme animal*, 163.

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8. Physiology as Literary Genre

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